

N30 Supervisory Controller Point Mapping

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N30 Supervisory Controller Point Mapping

Introduction

The N30 Supervisory Controller (referred to as N30 throughout this document) provides supervisory functions to intelligent controllers. The controllers have a number of points and internal parameters, which are used to store input data and control hardware (for example, temperature sensors and fan controls). This document assumes that you are manually entering points using a VT100 Terminal or VT100 Terminal Emulator. This document contains:

- considerations when mapping points in an N30 database
- where to get configuration printouts for controllers

This document also describes how to:

- read configuration printouts for Air Handling Unit (AHU), Unitary (UNT) Controller, Variable Air Volume (VAV) Controller, Phoenix Interface Module (PHX), and TC-9100 controllers
- read Lab and Central Plant Controller (LCP/DC9100) and DX-9100 configuration printouts
- add controllers to an N30 database with Project Builder
- add controllers to an N30 database with a VT100
- map controller points to N30 objects with Project Builder
- map controller points to N30 objects with a VT100

This document also contains point mapping tables to map controller points to the N30 database.

Note: Unless otherwise indicated, the information in this document also applies to the N31 Supervisory Controller.

Key Concepts

N30 Database

Database where the N30 system is defined. Contains information about controllers, points, alarms, etc.

Database Generation

Database generation in an N30 consists of setting up the site and then creating and adding controllers and objects (such as schedules, energy management objects, and operators).

Creating Databases for Networked N30s

Setting up an N30 network database is similar to the procedures used to set up a standalone N30 database. The main differences are the necessity of defining a copy holder device and a BACnet® Broadcast Management Device (BBMD) object when it is necessary to communicate across network segments.

Note: BBMD objects should be defined **only** when they are necessary to communicate across network segments.

Point Mapping to an N30

Note: The limits described in this document apply regardless of how the points are mapped into the N30.

The N30 maps controller point data to objects in the N30 so that points in the controller are identified with objects in the N30. This allows an N30 to read and write to the points in the controller.

N30s cannot use all the points in the controller. Of the points that can be used, only some are commandable. In the point mapping tables in this document, the Command Allowed column indicates which points are N30 commandable. N30s can read the values of non-commandable points, but cannot issue commands, override, or adjust these points. N30s can both read and control commandable points.

When you map controller points to the N30, it is very important that you consider which controller points are non-commandable. Map non-commandable controller points to N30 objects that you do not want controlled by the N30. Conversely, map commandable controller points to N30 objects that you want the N30 to control.

Project Builder

Project Builder defines the N30 Supervisory Controller database offline by mapping points from field devices to N30 objects and adding other N30 objects such as schedules and calendars. Project Builder allows downloads and uploads to any N30 in the network and to N2 controllers that are attached to N30s. Project Builder defines N30 and N2 Controller objects, imports predefined N2 controller configuration files from Configuration Tools and Advanced Installation Management (AIM) Point Schedules to map the input and output points to the N30, and adds and edits objects in the project database.

Related Documents

Refer to Table 1 for documents related to N30 point mapping:

Table 1: Related Documents

For Information About	Refer To
Using Project Builder and M-View	<i>Project Builder User's Guide (LIT-693205)</i>
Setting up an N30 System	<i>N30 Supervisory Controller Quick Start Technical Bulletin (LIT-6891200).</i>

Configuration Printouts

To map controller points to an N30, you need to know the point type and address of the points in the controller. Table 2 lists where you can get this information for different types of controllers, and where you can find instructions on how to generate the controller printouts.

Table 2: Controller Configuration Printouts

Controller Type	Configuration Printout	Tool Printed From	Instructions Located In:
Air Handling Unit (AHU) Unitary (UNT) Controller Variable Air Volume (VAV) Controller VAV 1400 Series Modular Assembly (VMA1400) Phoenix Interface Module(PHX) Terminal Controller (TC-9100)	.PRN	Configuration Tools (HVAC PRO™)	<i>HVAC PRO User's Guide (LIT-63750405)</i>
Lab and Central Plant Controller (LCP/DC9100)	.GPS	Configuration Tools (LCP Graphic Configuration Tool) Note: The LCP/DC9100 x.x configuration tool is installed by and accessed from HVAC PRO software.	<i>HVAC PRO User's Manual (LIT-63750405)</i>
Extended Digital Controller (DX-9100)	.DMO	Configuration Tools (GX-9100 Configuration Tool)	<i>GX-9100 Software Configuration Tool User's Guide (LIT-6364060)</i>
Intelligent Lighting Controller (ILC)*	Total Usage Report	Report printed from ILC Program menu.	<i>Intelligent Lighting Controller Technical Manual</i>
Intelligent Fire Controller (IFC)	Installed Point Report	Report printed from Fire Panel.	<i>IFC-1010/2020 Operations Technical Bulletin (LIT-448100)</i>
	Forward and Reverse Zones printed from Master Database	Zones from Master Database printed from FIRE PRO.	<i>Point Programming Using FIRE PRO Technical Bulletin (Lit-445050)</i>
Extension Module (XTM or XT)	See the XTM or XT documentation, and the XTM (or XT) point mapping table (Table 20) in this document.		
Metasys Integrator® Unit	See Metasys Integrator vendor-specific application note.		
N2-Compatible Vendor Device (VND)	See vendor literature. In some cases, the vendor supplies a .prn file.		

* The point mapping table for ILCs is not valid for Microlite lighting controllers.

Supported Application Specific Controllers (ASCs)

The N30 supports all current N2 devices except the N2 Dialer. This includes Metasys® (AS) and Facilitator (FA) models, and support for the VMA1400 Series controller. Table 3 shows the firmware version of all currently supported ASCs.

Note: Older code revisions of the Metasys Integrator unit, Variable Air Volume (VAV), Unitary (UNT), and Air Handling Unit (AHU) controllers are not allowed on an N30 system. They are forced offline when detected.

Table 3: Firmware Revision of Current ASCs*

Device/Controller Type	Revision	Comments
DR-9100	1.x	Room Controller
DR-9100	2.x	Room Controller
DC-9100	1.x	Plant Controller
DC-9100	2.x	Plant Controller
DO-9100	1.x	Digital Optimizer
DX-9100	1.x	Digital Controller
DX-9100	2.x	Digital Controller
TC-9100	1.x-3.x	Temperature Controller
TEC1100	All	N2 LCD Thermostat
TEC2100	All	N2 LCD Thermostat
XT-9100	1.x	Extension Module
XTM-101	1.x	Extension Module
XTM-105	1.x	Extension Module
XTM-905	1.x	Extension Module
LCP-xxx	All	Lab and Central Plant Controller
MIG	3.0 or later	Metasys Integrator Unit
UNT	B03 or later	Unitary Controller
VAV	A03 or later	Variable Air Volume Controller
AHU	C03 or later	Air Handling Unit Controller
PHX	All	Phoenix Interface Module
VMA1400	All	VAV Modular Assembly
VND (Vendor Devices)	All	Metasys Compatible (by others) including TECx100
ILC	All	Intelligent Lighting Controller
IFC-1010/2020	All	Intelligent Fire Controller

* Some controllers are unique to a local market and may not be available on a global basis.

Procedure Overview

Table 4: N30 Object Mapping

To Do This	Follow These Steps:
Read Configuration Printouts	Look for the columns labeled Point Type and Point Address. Use that information when specifying Network Point Type and Network Point Address in an N30.
Read LCP/DC9100 and DX-9100 Configuration Printouts	Highlight the points you want to define as N30 objects. Note the description of the points you are including. From the description, use the controller's point mapping table to determine the Network Point Type and Network Point Address and whether the point can be commanded.
Add Controllers to the N30 Database with Project Builder	In Project Builder, drag the controller object from the N30 Object Library to the N2 container in the N30 where you are adding the controller. Double-click the row head of the new controller object. Enter an Object Name and Description for the controller you are adding (optional). Use the tab key to move down to the Controller Type field. Select the controller type you are adding from the drop-down list. Use the tab key to move down to the Net N2 Address field and enter the network address of your controller. Press OK.
Add Controllers to the N30 Database with a VT100	Select the N2 container in the N30 where you are adding the controller. Press the F3 (Add) key. Select Controller. Press Enter. Enter an Object Name and Description. Use the arrow keys to move to the Controller Type field. Select the controller type you are adding. Press the Tab key to move to the Net N2 Address field and enter the network address of your controller. Press the F3 (Save) key.
Continued on next page . . .	

To Do This (Cont.)	Follow These Steps:
Map Controller Points to N30 Objects with Project Builder	Expand the N2 container in the N30 that contains the controller to which you want to map points. Using the configuration printout for the controller to which you are mapping points, determine the type of N30 object to add to the N30 to correspond with the point in the controller you are mapping. In the Object Library, select the object type you are using from the N30 library. Drag the object to the controller. Double-click the row head of the new object. The M-View screen for that object appears. Enter an Object Name and Description for the new object (optional). Use the tab key to move the cursor down to the Net Point Type field and use the drop-down list to select the point type of the point from which you are mapping. Use the Tab key to move to the Net Point Address field and, using the appropriate point mapping table and your controller's configuration printout, enter a valid address. Press OK. Repeat this process until all points are mapped.
Map Controller Points to N30 Objects with a VT100	Select and expand the N2 container in the N30 where the controller is located. Select the controller to be mapped. Press the F3 (Add) key. Using the configuration printout for the controller you are mapping, determine the type of point to add to the N30 to correspond with the point in the controller. Select the point type and press Enter. Enter an Object Name and Description for the new point object. Enter the Net Point Type. Enter the Net Point Address field. Press the F3 (Save) key. Repeat this process until all points are mapped.

Detailed Procedures

Reading Configuration Printouts

Note: This section applies to AHU, UNT, VAV, VMA, PHX, and TC-9100 controllers. Printouts for the LCP/DC9100 and DX-9100 are explained in the next section, *Reading LCP/DC9100 and DX-9100 Configuration Printouts*.

To read configuration printouts:

1. Look for the columns labeled Point Type and Point Address in the configuration printouts (see Table 2 for a list of how to get configuration printouts for various controllers).
2. Use this information when specifying Network Point Type and Network Point Address in an N30. See *Mapping Controller Points to N30 Objects with Project Builder* or *Mapping Controller Points to N30 Objects with a VT100* in this document.

Note: When you name points in an N30, you can use the names shown in the Long Name column (for example, Zone TEMP) for consistency, or you can create new names.

Figure 1 shows a portion of a configuration printout (.PRN file) for a VAV (printed from HVAC PRO software). Configuration files from different controllers or versions of HVAC PRO software will have slight variations. However, you'll still use the Point Type and Point Address columns to determine the Network Point Type and Network Point Address for use in an N30.

```

ANALOG INPUTS (* Denotes OPERATOR-DEFINED AI)
Point      Point
Type       Address   Long Name           Short Name
-----
AI         1         Zone Temp           ZN-T
AI         4         Supply Delta P     SUPPLY-DP

BINARY INPUTS (* Denotes OPERATOR-DEFINED BI)
Point      Point
Type       Address   Long Name           Short Name
-----
BI         1         AIRFLOW            AIRFLOW
BI         2         LOW LIMIT STATUS   LL-STAT

ANALOG OUTPUTS (* Denotes OPERATOR-DEFINED AO)
(NONE)

BINARY OUTPUTS (* Denotes OPERATOR-DEFINED BO)
Point      Point
Type       Address   Long Name           Short Name
-----
BO         1         Damper Open        DMP-OPEN
BO         2         Damper Close       DMP-CLSE

PARAMETERS (* Denotes MONITOR ONLY Parameters)
Point      Point      Long Name           Short Name   Value
-----
Modes
BD         225       Warmup Command     Wrm Cmd     ****
*BD        16        Starved Box         StarvBox    ****
BD         227       Occupied Command   Occ Cmd     ****
ADI        225       Occ Start Time     OccStart    00:00
ADI        226       Occ Stop Time      OccStop     00:00
*BD        22        Occupied Status    Occ Stat    ****
BD         228       Standby Command    Stby Cmd   ****
BD         229       Shutdn Box Open    Cmd Box Open ****

Zone Cooling Set Points
ADF        129       Occ Clg Setpt     Occ Clg     72.0
ADF        130       Stby Clg Setpt    Stby Clg    74.0
ADF        131       Unocc Clg Setpt   Unoc Clg    80.0
    
```

Figure 1: Example .PRN File for a VAV

Reading LCP/DC9100 and DX-9100 Configuration Printouts

For the DX-9100, the .DMO file is generated automatically when you save the controller's configuration.

For the LCP/DC9100, print the configuration by loading the controller's configuration file into HVAC PRO software. Then select the following menu options: SYSTEM > PRINT > ALLDATA. An example of an LCP/DC9100 configuration file is in Figure 2.

Once you have a hard copy of the controller configuration file:

1. Highlight (for example, using a yellow highlighter) the points you want to define as N30 objects.
2. Note the description of the points you are including. For example, Analog Input 1 is the description of an analog input hardware point. Proportional Band is the description of the proportional band internal point of a control module.
3. From the description, use the controller's point mapping table in this document to determine the Network Point Type and Network Point Address and whether the point can be commanded.

For example, note the description Digital Output 3 in the sample printout in Figure 2. Find Digital Output 3 in the right-hand column of Table 17. You'll see in the two left-hand columns that BO is the Network Point Type and 1 is the Network Point Address corresponding to the Digital Output 3 description. The Command Allowed column indicates that this is a commandable point.

The following example shows only portions of the LCP/DC9100 configuration file printout. For example, only two analog inputs are shown instead of the eight that would normally be listed.

Note the description Digital Output 3. Find Digital Output 3 in the right-hand column of Table 17. In the left-hand column, BO1 is the hardware reference corresponding to the Digital Output 3 description.

```

* ANALOG INPUT 1 *      * ANALOG INPUT 2 *
  Tag Name==> CW_SUP_TWR      Tag Name==> CW_SUP_CTY
  Sensor Type (A/P)==> P      Sensor Type (A/P)==> P
  Range==> 8                  Range==> 8
  Low Limit==> 75.0          Low Limit==> 0
  High Limit==> 95.0         High Limit==> 100
  Filter Cons.==> 0          Filter Cons.==> 0
  Square Root:0=N==> 0       Square Root:0=N==> 0
  Low Range==> -50           Low Range==> -50
  High Range==> 250          High Range==> 250

*** LISTING FOR THE DIGITAL INPUTS ***

* DIGITAL 1 *      * DIGITAL 2 *
  TAG NAME==> CLG_TWR_FAN      TAG NAME==> CW_PUMP

* DIGITAL 3 *      * DIGITAL 4 *
  TAG NAME==> SYSTEM_ENE      TAG NAME==> DIGITAL

*** LISTING FOR THE OUTPUTS ***

* ANALOG OUTPUT 1 *      * ANALOG OUTPUT 2 *
Output Tag Name==> CITY_BYPASS      Output Tag Name==> TWR_BYPASS
  Source Point==> OCM4              Source Point==> OCM1
  Low Range==> 0                    Low Range==> 0
  High Range==> 100                 High Range==> 100
  Type (0, 1, 2)==> 0               Type (0, 1, 2)==> 0

*** LISTING FOR THE DIGITAL OUTPUTS ***

* DIGITAL 3 & 4 (ON/OFF) *
  Tag Name A==> CITY_BYPASS
  Source A==> LCM3
  Tag Name B==> CITY_SUPPLY
  Source B==> LCM4

* DIGITAL 5 & 6 (ON/OFF) *
  Tag Name A==> CITY_DRAIN
  Source A==> LCM4
  Tag Name B==> CLG_TWR_FAN
  Source B==> CMH3

```

Figure 2: LCP/DC9100 Configuration File Example

Adding Controllers to an N30 Database with Project Builder

To add controllers to an N30 database with Project Builder:

1. In the main Project Builder screen (Figure 3), drag the controller object from the N30 Object Library to the N2 container in the N30 where you are adding the controller.



Figure 3: Main Project Builder Screen

2. Double-click the row head of the new controller object. The M-View screen for controllers appears (Figure 4).

Edit Attributes - N30P497.N2.Controller

MView

Configuration

Object

Object Name: VMA2

Description: First Floor East

Object Type: Controller

Object Category: HVAC

Enabled: True

Network

Controller Type: VMA

Net N2 Address: 103

Setup

File Name:

Notification Class: 4194001

OK Cancel Help

Figure 4: M-View Screen for New Controller Object

3. Enter an Object Name and Description for the controller you are adding (optional).
4. Use the tab key to move down to the Controller Type field.
5. Select the controller type you are adding from the drop-down list.
6. Use the tab key to move down to the Net N2 Address field and enter the network address of your controller.
7. Press OK.

Adding Controllers to the N30 Database with a VT100

To add controllers to an N30 database with a VT100:

1. Select the N2 container in the N30 where you are adding the controller.
2. Press the F3 (Add) key. The Add Objects to N2 Container screen appears (Figure 5).

```

SER          N30P497          Device Offline      25 Feb 1998 13:06:10
N30P497: ADMIN          Wed 25 Feb 1998 13:08 CST
=====
                          Add Object
                          Controller
                          Analog Alarm
                          Multistate Alarm
                          Analog Totalization
                          Runtime Totalization
                          Event Totalization
                          Trend Log
                          Container
                          Data Broadcast

F1-Ack  F4-Cancel Return-Select

```

Figure 5: Add Objects to N2 Container Screen

3. Select Controller.
4. Press the Enter key. A new controller object screen appears (Figure 6).

```

SER          N30P497          Device Offline      25 Feb 1998 13:06:10
N30P497: ADMIN          Wed 25 Feb 1998 13:11 CST
=====
N30P497.N2.VMA{0}
-----
Object
Object Name          VMA1
Description          First Floor West
Object Type          Controller
Object Category      HVAC
Enabled              True
Network
Controller Type      VMA
Net N2 Address       0
Setup
File Name
Notification Class   4194001

F1-Ack  F3-Save F4-Cancel
Enter an alphanumeric string

```

Figure 6: New Controller Object Screen

5. Enter an Object Name and Description for the controller you are adding (optional).
6. Use the arrow keys to move down to the Controller Type field.
7. Use the spacebar and Backspace key to cycle through the list of controller types until the controller you are adding appears.
8. Press the Tab key or arrows to move to the Net N2 Address field and enter the network address of your controller.
9. Press the F3 (Save) key.

Mapping Controller Points to N30 Objects with Project Builder

To map controller points to N30 objects with Project Builder:

1. If you have not already done so, expand the N2 container in the N30 that contains the controller to which you want to map a point.
2. Using the configuration printout for the controller to which you are mapping points, determine the type of object to add to the N30 to correspond with the point in the controller you are mapping.

For example, to map an Analog Data Float (ADF) point from a VMA1400 to an N30, go to Table 8 in this document. In the Network Point Type Column find ADF. The ADF row shows the type of N30 objects to which you can map an ADF point, depending on the Network Point Address and your project.

3. In the Object Library, select the object type you are using from the N30 library. In this example, we selected an N2 AI point.
4. Drag the object to the controller.
5. Double-click the row head of the new object. The M-View screen for that object appears (Figure 7).

Edit Attributes - ADF103

MView

Configuration

Object

Object Name: ADF103

Description: From VMA.2

Object Type: N2 AI

Object Category: HVAC

Enabled: True

Network

Net N2 Address: 103

Net Point Type: ADF

Net Point Addr: 103

Display

Units: deg F

Display Precision: 10ths

COV Increment: 0.1 deg F

OK Cancel Help

Figure 7: M-View Screen for N2 AI Point

6. Enter an Object Name and Description for the new point object (optional).
7. Use the tab key to move the cursor down to the Net Point Type field.
8. On the Net Point Type drop-down list, select the point type of the point from which you are mapping.
9. Use the Tab key or arrows to move to the Net Point Address field and, using the appropriate point mapping table and your controller's configuration printout, enter a valid address.
10. Press OK.

Note: The N30 requires a valid address to save the object.

11. Repeat Steps 2 through 10 until all the points are mapped.

Mapping Controller Points to N30 Objects with a VT100

To map controller points to N30 objects with a VT100:

1. Select and expand the N2 container in the N30 where the controller is located.
2. Select the controller to which you are mapping points and press the F3 (Add) key. The Add Object to Controller screen appears (Figure 8).

```
SER      N30P497      Device Offline      25 Feb 1998 13:06:10
N30P497: ADMIN      Wed 25 Feb 1998 13:12 CST
=====
                          Add Object
                          N2 AI
                          N2 BI
                          N2 AO
                          N2 BO
                          N2 MSI
                          N2 MSO
                          N2 PC
                          Analog Alarm
                          Multistate Alarm
                          Analog Totalization
                          Runtime Totalization
                          Event Totalization
                          Trend Log
                          Container
                          Data Broadcast
F1-Ack  F4-Cancel  Return-Select
```

Figure 8: Add N2 Point Object Screen

- Using the configuration printout for the controller to which you are mapping points, determine the type of point to add to the N30 to correspond with the point in the controller you are mapping.

For example, to map an Analog Data Float (ADF) point from a VMA1400 to an N30, go to Table 8 in this document. In the Network Point Type Column find ADF. The ADF row shows the type of N30 objects to which you can map an ADF point, depending on the Network Point Address and your project.

- Select the point type and press the Enter key. A new N2 point object screen of the type selected appears (Figure 9).

```

SER          N30P497          Device Offline          25 Feb 1998 13:06:10
N30P497: ADMIN          Wed 25 Feb 1998 13:22 CST
=====
          N30P497.N2.VMA{102}.ADF{102}
-----
Object
Object Name          ADF102
Description          From VMA1
Object Type          N2 AI
Object Category      HVAC
Enabled              True
Network
Net N2 Address      102
Net Point Type      ADF
Net Point Addr      102
Display
Units              deg F
Display Precision   10ths
COV Increment      0.1 deg F

F1-Ack
Save was successful. Press any key to continue

```

Figure 9: New N2 Point Object Configuration Screen

5. Enter an Object Name and Description for the new point object (optional).
 6. Use the arrow keys to move the cursor down to the Net Point Type field and, using the appropriate point mapping table and the configuration printout for your controller, enter the point type.
 7. Use the Tab key or arrows to move to the Net Point Address field and, using the appropriate point mapping table and your controller's configuration printout, enter a valid address.
 8. Press the F3 (Save) key.
- Note: The N30 requires a valid address to save the object.
9. Press any key to return to the Add Objects screen that shows the list of N2 point objects that can be added.
 10. Repeat Steps 2 through 9 until all the points are mapped.

Point Mapping Tables

This section includes point mapping tables for the following controllers:

- AHU - Air Handling Unit
- UNT - Unitary Controller
- VAV - Variable Air Volume Controller
- VMA1400 - Variable Air Volume Controller Modular Assembly 1400 Series
- PHX - Phoenix Interface Module
- Metasys Integrator Unit
- VND - N2-Compatible Vendor Device
- ILC - Intelligent Lighting Controller (Not valid for Microlite lighting controllers)
- IFC - Intelligent Fire Controller
- TC-9100 - Series of Controllers
- LCP/DC9100 - Lab and Central Plant Controller
- DX-9100 - Digital Controller
- XTM and XT - Expansion Module
- TEC1100
- TEC2100

The point mapping tables indicate:

- which controller points can be mapped to N30
- whether the controller points can be commanded (overridden) by N30 (whether they are Read Only or Read/Write)
- whether the points support override status
- to which N30 software point types the controller points map

In the point mapping tables, the point type abbreviations refer to the following:

AI	Analog Input
BI	Binary Input
AO	Analog Output
BO	Binary Output
ADF	Analog Data Float
ADI	Analog Data Integer
BD	Binary (byte) Data
LRS	Logic Results
PMK	Programmable Module Constants (written to EEPROM)
PMO	Programmable Module Outputs
PML	Programmable Module Logic
PMA	Programmable Module Accumulator

Air Handling Unit (AHU)

Table 5 describes AHU to N30 object mapping.

Table 5: AHU Point Mapping to N30s

Network Point Type	Network Point Address	Command Allowed	Can Map to N30 Objects:
AI	1-8	Yes	N2_AI, N2_MSI, N2_MSO
AO	1-8	Yes	N2_AO, N2_MSO
BI	1-8	Yes	N2_BI, N2_BO BI 7-8 can be mapped to N2_PC
BO	1-10	Yes	N2_BO
ADF	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
ADI	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
BD	1-64		N2_AI, N2_BI, N2_MSI
	65-256 ¹	Yes	N2_AI, N2_AO, N2_BI, N2_BO, N2_MSI, N2_MSO

1 BD245 through BD248 are reserved for user-defined data storage points.

Unitary (UNT) Controller

Table 6 describes UNT to N30 object mapping.

Table 6: UNT Point Mapping to N30

Network Point Type	Network Point Address	Command Allowed	Can Map to N30 Objects:
AI	1-40	Yes	N2_AI, N2_AO
AO	1-8	Yes	N2_AO
BI	1-37	Yes	N2_BI, N2_BO BI 4 can be mapped to N2_PC
BO	1-14	Yes	N2_BO
ADF	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
ADI	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
BD	1-64		N2_AI, N2_BI, N2_MSI
	65-256 ¹	Yes	N2_AI, N2_AO, N2_BI, N2_BO, N2_MSI, N2_MSO

1 BD245 through BD248 are reserved for user-defined data storage points.

Variable Air Volume (VAV) Controller

Table 7 describes VAV to N30 object mapping.

Table 7: VAV Point Mapping to N30

Network Point Type	Network Point Address	Command Allowed	Can Map to N30 Objects:
AI	1-6	Yes	N2_AI, N2_MSI, N2_MSO
AO	1-8	Yes	N2_AO, N2_MSO
BI	1-5	Yes	N2_BI, N2_BO BI 4 can be mapped to N2_PC
BO	1-8	Yes	N2_BO
ADF	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
ADI	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
BD	1-64		N2_AI, N2_BI, N2_MSI
	65-256 ¹	Yes	N2_AI, N2_AO, N2_BI, N2_BO, N2_MSI, N2_MSO

1 BD245 through BD248 are reserved for user-defined data storage points.

VAV Controller Modular Assembly (VMA) 1400 Series

Table 8 describes VMA1400 to N30 object mapping.

IMPORTANT: Only points defined in the HVAC PRO software configuration can be mapped to the N30. VMA format errors are generated if this rule is not followed.

Table 8: VMA Point Mapping to N30

Network Point Type	Network Point Address	Command Allowed	Can Map to N30 Objects:
AI	1-6	Yes	N2_AI, N2_MSI, N2_MSO
AO	1-8	Yes	N2_AO, N2_MSO
BI	1-5	Yes	N2_BI, N2_BO
BO	1-8	Yes	N2_BO
ADF	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
ADI	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
BD	1-64		N2_AI, N2_BI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_BI, N2_BO, N2_MSI, N2_MSO

Phoenix Interface Module (PHX)

Table 9 describes PHX to N30 object mapping.

Table 9: PHX Point Mapping to N30s

Network Point Type	Network Point Address	Command Allowed	Can Map to N30 Objects:
AI	1-40	Yes	N2_AI, N2_MSI, N2_MSO
AO	1-8	Yes	N2_AO, N2_MSO
BI	1-37	Yes	N2_BI, N2_BO BI 4 can be mapped to N2_PC
BO	1-14	Yes	N2_BO
ADF	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
ADI	1-64		N2_AI, N2_MSI
	65-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
BD	1-64		N2_AI, N2_BI, N2_MSI
	65-256 ¹	Yes	N2_AI, N2_AO, N2_BI, N2_BO, N2_MSI, N2_MSO

¹ BD245 through BD248 are reserved for user-defined data storage points.

Metasys Integrator Unit

Table 10 describes Metasys Integrator unit to N30 object mapping.

Table 10: Metasys Integrator Point Mapping to an N30

Network Point Type	Network Point Address	Command Allowed	Can Map to N30 Objects:
AI	1-256	Yes	N2_AI, N2_MSI, N2_MSO
AO	1-256	Yes	N2_AO, N2_MSO
BI	1-256	Yes	N2_BI, N2_BO, N2_PC
BO	1-256	Yes	N2_BO
ADF	1-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
ADI	1-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO, N2_PC
BD	1-256	Yes	N2_AI, N2_AO, N2_BI, N2_BO, N2_MSI, N2_MSO

N2-Compatible Vendor Device (VND)

Table 11 describes VND to N30 object mapping.

Table 11: VND Point Mapping to an N30

Network Point Type	Network Point Address	Command Allowed	Can Map to N30 Objects:
AI	1-256	Yes	N2_AI, N2_MSI, N2_MSO
AO	1-256	Yes	N2_AO, N2_MSO
BI	1-256	Yes	N2_BI, N2_BO
BO	1-256	Yes	N2_BO
ADF	1-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO
ADI	1-256	Yes	N2_AI, N2_AO, N2_MSI, N2_MSO, N2_PC
BD	1-256	Yes	N2_AI, N2_AO, N2_BI, N2_BO, N2_MSI, N2_MSO

Intelligent Lighting Controller (ILC)

Before you map ILC points to N30 objects, the ILC must be programmed. Refer to the *ILC Standalone/Standalone Network Programming Technical Bulletin (LIT-6385035)*.

Table 12 describes ILC to N30 object mapping.

Note: The point mapping table for ILCs is not valid for Microlite lighting controllers; instead, use the VND table.

Table 12: ILC Point Mapping to an N30

Network Point Type	Network Point Address	Command Allowed	Override Status	Can Map to N30 Objects:	Description
ADI	1-32	Yes	No	N2_AI N2_AO	Current month runtime lighting Groups 1-32 (hours)
ADI	33-64	Yes	No	N2_AI N2_AO	Previous month runtime lighting Groups 1-32 (hours)
BO	1-32	Yes	Yes	N2_BO	Lighting groups (manual override)

Intelligent Fire Controller (IFC)

Before you map IFC points to N30 objects, the IFC must be programmed. See the *IFC-1010/2020 Technical Manual* and *Fire Management Accessories Manual*.

All points are mapped to N30 BI (Binary Input) points.

All points are read only (no commands allowed).

It is the user's option to map either a general trouble status point or a trouble status point for each zone.

The fire alarm panel reports only exceptions. Newly added fire points must wait for an exception report before reporting online. An offline/online transition for the whole controller also will generate exception reports.

Table 13 describes IFC to N30 object mapping.

Table 13: IFC Point Mapping to an N30

Network Point Type	Network Point Address	Can Map to N30 Objects:	N30 Object Description and Units	Notes
BI	1-240	BI	Zone State (Nor/Alm)	1. Zone will display trouble status (T). 2. Override status (O) = zone disabled at fire panel.
BD	1-240	BI	Zone Trouble (Nor/Tbl)	No trouble status (T)
BD	241	BI	UPS Battery Low (Ok/Alm)	
BD	242	BI	AC Power Fail (Ok/Alm)	
BD	243	BI	Database Fault (Ok/Alm)	
BD	244	BI	System Alarm (Nor/Alm)	General system alarm point
BD	245	BI	System Trouble (Nor/Tbl)	General system trouble point
BD	246	BI	Alarm Silenced (No/Yes)	

TC-9100 Terminal Controller

Two tables show TC-9100 Terminal Controller series point mapping. Table 14 shows how TC-9100 points can map to N30 objects. Table 15 provides more detail about the points (e.g., tag names, item descriptions, and which points are commandable). Use the .PRN file generated by HVAC PRO software to determine which points are applicable to the specific TC-9100 controller you are mapping (e.g., TC-9102).

Table 14: TC-9100 Point Mapping to an N30

TC-9100 Network Point Type		N30 Object Type
AI	1 to 10	
BD	1 to 2	N2_AI
PMK	1 to 42*	
BI	1 to 14	N2_BI
AO	1 to 18	
BD	1 to 2	N2_AO
PMK	1 to 42*	
BO	1 to 13	
BD	1 to 2	N2_BO

* All but PMK1 stored in EEPROM (maximum 10,000 write commands).

Table 15: TC-9100 Point Mapping (Detail)

Network Point Type	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
AI	1			AI1	Process Temperature
AI	2			AI2	Remote Temperature Setpoint Bias
AI	3			AI3	Pressure
AI	4			AI4	Override Input
AI	5			AI5	DR-9100 only
AI	6			AI6	DR-9100 only
AI	7			SPARE	
AI	8			SPARE	
AI	9			WAC	Winter Authority Correction
AI	10			SAC	Summer Authority Correction
BI	1			WIN	Window Sense
BI	2			OCC	Occupancy Sense
BI	3			AIRQ	Air Quality Sense
BI	4			MODT	Temporary Mode
BI	5			ALT	Alternate Mode
BI	6			SUPS	Supervisory Mode Status
BI	7			SPARE	
BI	8			SPARE	
BI	9			REVL	Reverse Action Local
BI	10			L1A	Loop 1 Active
BI	11			ALM	General Alarm
BI	12			AFM	Low Limit Mode Active
BI	13			FOV	Three Speed Fan Override
BI	14			L3A	Loop 3 Active
AO	1	Yes	Yes	OCM1	Output Programmable Module 1
AO	2	Yes	Yes	OCM2	Output Programmable Module 2
AO	3	Yes	Yes	OCM3	Output Programmable Module 3
AO	4	Yes	Yes	OCM4	Output Programmable Module 4
AO	5	Yes	Yes	OCM5	Output Programmable Module 5
AO	6	Yes	Yes	OCM6	Output Programmable Module 6
AO	7	Yes	Yes	WSP 1	Working Set Point Loop 1
AO	8	Yes	Yes	WSP 2	Working Set Point Loop 2
AO	9	Yes	Yes	WSP 3	Working Set Point Loop 3
AO	10	Yes	Yes	WSP 4	Working Set Point Loop 4
AO	11	Yes	Yes	WSP 5	Working Set Point Loop 5
AO	12	Yes	Yes	WSP 6	Working Set Point Loop 6
AO	13	Yes		XAI1	External Input 1
AO	14	Yes		XAI2	External Input 2
AO	15	Yes		XAI3	External Input 3
AO	16	Yes		XAI4	External Input 4
AO	17	Yes		AC05	Analog Constant 5

Continued on next page . . .

Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
AO	18	Yes		AC06	Analog Constant 6
BO	1	Yes	Yes	D01	TRIAC 1
BO	2	Yes	Yes	D02	TRIAC 2
BO	3	Yes	Yes	D03	TRIAC 3
BO	4	Yes	Yes	D04	TRIAC 4
BO	5	Yes	Yes	D05	TRIAC 5
BO	6	Yes	Yes	D06	TRIAC 6
BO	7	Yes	Yes	D07	TRIAC 7
BO	8	Yes		SOFF	Shutoff Mode
BO	9	Yes		STUP	Startup Mode
BO	10	Yes		DAY	DR-9100 Only
BO	11	Yes		SUPC	Supervisory Mode Control (See BD-2 and Note)
BO	12	Yes		MAN	Manual Operation Mode
BO	13	Yes		REVC	Reverse Action Command
BD	1	Yes		MODS	Mode Status: Night, Standby, Comfort, Off
BD	2	Yes	Yes	MODC	Mode Command: Night, Standby, Comfort, Off (See Note)
PMK	1	Yes		PM1K1	Module 1 Constant: K1
PMK	2	Yes*		PM1K2	K2
PMK	3	Yes*		PM1K3	K3
PMK	4	Yes*		PM1K4	K4
PMK	5	Yes*		PM1K5	K5
PMK	6	Yes*		PM1K6	K6
PMK	7	Yes*		PM1K7	K7
PMK	8	Yes		PM2K1	Module 2 Constant: K1
PMK	9	Yes*		PM2K2	K2
PMK	10	Yes*		PM2K3	K3
PMK	11	Yes*		PM2K4	K4
PMK	12	Yes*		PM2K5	K5
PMK	13	Yes*		PM2K6	K6
PMK	14	Yes*		PM2K7	K7
PMK	15	Yes		PM3K1	Module 3 Constant: K1
PMK	16	Yes*		PM3K2	K2

Note: If BD-2 is mapped into N30 as an N2_BO (recommended), commands to this BO switch the controller mode between Night/Comfort. This allows N30 to weekly schedule the controller mode. If BD-2 is mapped into N30 as an N2_AO/N2_MSO, a manual command can command this AO/MSO to any of the four controller modes. Only one of these methods (BO or AO/MSO) may be used. **The recommended method of controlling the mode is to map BD-2 into an N30 N2_BO object.**

The override status flag for BD-2 is SUPC (BO-11). A command to BD-2 will set SUPC, and a release or auto command will clear it.

* Item stored in EEPROM (maximum 10,000 write commands).

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description	
PMK	17	Yes*		PM3K3	Module 3 Constant:	K3
PMK	18	Yes*		PM3K4		K4
PMK	19	Yes*		PM3K5		K5
PMK	20	Yes*		PM3K6		K6
PMK	21	Yes*		PM3K7		K7
PMK	22	Yes		PM4K1	Module 4 Constant:	K1
PMK	23	Yes*		PM4K2		K2
PMK	24	Yes*		PM4K3		K3
PMK	25	Yes*		PM4K4		K4
PMK	26	Yes*		PM4K5		K5
PMK	27	Yes*		PM4K6		K6
PMK	28	Yes*		PM4K7		K7
PMK	29	Yes		PM5K1	Module 5 Constant:	K1
PMK	30	Yes*		PM5K2		K2
PMK	31	Yes*		PM5K3		K3
PMK	32	Yes*		PM5K4		K4
PMK	33	Yes*		PM5K5		K5
PMK	34	Yes*		PM5K6		K6
PMK	35	Yes*		PM5K7		K7
PMK	36	Yes		PM6K1	Module 6 Constant	K1
PMK	37	Yes*		PM6K2		K2
PMK	38	Yes*		PM6K3		K3
PMK	39	Yes*		PM6K4		K4
PMK	40	Yes*		PM6K5		K5
PMK	41	Yes*		PM6K6		K6
PMK	42	Yes*		PM6K7		K7

* Item stored in EEPROM (maximum 10,000 write commands).

Lab and Central Plant Controller/Digital Controller (LCP/DC9100)

Two tables show LCP/DC9100 point mapping. Table 16 shows how LCP/DC9100 points can map to N30 objects. Table 17 provides more detail about the LCP/DC9100 points (e.g., tag names and which points are commandable).

Table 16: LCP/DC9100 Point Mapping to N30

LCP/DC9100 Network Point Type	N30 Object Type
AI, ADF	N2_AI
ADF	N2_AO
BI, BD	N2_BI
BO, BD	N2_BO

Table 17: LCP/DC9100 Point Mapping (Detail)

Network Point Type	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
AI	1			AI1	Analog Input 1
AI	2			AI2	Analog Input 2
AI	3			AI3	Analog Input 3
AI	4			AI4	Analog Input 4
AI	5			AI5	Analog Input 5
AI	6			AI6	Analog Input 6
AI	7			AI7	Analog Input 7
AI	8			AI8	Analog Input 8
BI	1			DI1	Digital Input 1
BI	2			DI2	Digital Input 2
BI	3			DI3	Digital Input 3
BI	4			DI4	Digital Input 4
BI	5			DI5	Digital Input 5
BI	6			DI6	Digital Input 6
BI	7			DI7	Digital Input 7
BI	8			DI8	Digital Input 8
BO	1	Yes	Yes	DO3	Digital Output 3
BO	2	Yes	Yes	DO4	Digital Output 4
BO	3	Yes	Yes	DO5	Digital Output 5
BO	4	Yes	Yes	DO6	Digital Output 6
BO	5	Yes	Yes	DO7	Digital Output 7
BO	6	Yes	Yes	DO8	Digital Output 8
BO	7	Yes		SOFF	Shut Off Mode
BO	8	Yes		STUP	Start Up Mode
ADF	1			NCM1	Output Numeric Module 1
ADF	2			NCM2	Output Numeric Module 2
ADF	3			NCM3	Output Numeric Module 3
ADF	4			NCM4	Output Numeric Module 4
ADF	5	Yes		ACO1	Analog Constant 1
ADF	6	Yes		ACO2	Analog Constant 2
ADF	7	Yes		ACO3	Analog Constant 3
ADF	8	Yes		ACO4	Analog Constant 4
ADF	9	Yes	Yes	OCM1	Output Control Module 1
ADF	10	Yes	Yes	OCM2	Output Control Module 2
ADF	11	Yes	Yes	OCM3	Output Control Module 3
ADF	12	Yes	Yes	OCM4	Output Control Module 4
ADF	13	Yes	Yes	OCM5	Output Control Module 5
ADF	14	Yes	Yes	OCM6	Output Control Module 6
ADF	15	Yes	Yes	OCM7	Output Control Module 7

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
ADF	16	Yes	Yes	OCM8	Output Control Module 8
ADF	17	Yes	Yes	WSP1	Working Setpoint Control Module 1
ADF	18	Yes	Yes	WSP2	Working Setpoint Control Module 2
ADF	19	Yes	Yes	WSP3	Working Setpoint Control Module 3
ADF	20	Yes	Yes	WSP4	Working Setpoint Control Module 4
ADF	21	Yes	Yes	WSP5	Working Setpoint Control Module 5
ADF	22	Yes	Yes	WSP6	Working Setpoint Control Module 6
ADF	23	Yes	Yes	WSP7	Working Setpoint Control Module 7
ADF	24	Yes	Yes	WSP8	Working Setpoint Control Module 8
ADF	25	Yes		LSP1	Control Module 1: Local Setpoint
ADF	26	Yes		PB1	Proportional Band
ADF	27	Yes		TI1	Reset Action
ADF	28	Yes		TD1	Rate Action
ADF	29	Yes		HIL1	Output High Limit
ADF	30	Yes		LOL1	Output Low Limit
ADF	31	Yes		BSB1	Standby STP Change
ADF	32	Yes		BOF1	Off Mode STP Change
ADF	33	Yes		DA1	Deviation Alarm Limit
ADF	34	Yes		LSP2	Control Module 2: Local Setpoint
ADF	35	Yes		PB2	Proportional Band
ADF	36	Yes		TI2	Reset Action
ADF	37	Yes		TD2	Rate Action
ADF	38	Yes		HIL2	Output High Limit
ADF	39	Yes		LOL2	Output Low Limit
ADF	40	Yes		BSB2	Standby STP Change
ADF	41	Yes		BOF2	Off Mode STP Change
ADF	42	Yes		DA2	Deviation Alarm Limit
ADF	43	Yes		LSP3	Control Module 3: Local Setpoint
ADF	44	Yes		PB3	Proportional Band
ADF	45	Yes		TI3	Reset Action
ADF	46	Yes		TD3	Rate Action
ADF	47	Yes		HIL3	Output High Limit
ADF	48	Yes		LOL3	Output Low Limit
ADF	49	Yes		BSB3	Standby STP Change
ADF	50	Yes		BOF3	Off Mode STP Change
ADF	51	Yes		DA3	Deviation Alarm Limit
ADF	52	Yes		LSP4	Control Module 4: Local Setpoint
ADF	53	Yes		PB4	Proportional Band
ADF	54	Yes		TI4	Reset Action
ADF	55	Yes		TD4	Rate Action

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
ADF	56	Yes		HIL4	Control Module 4: Output High Limit
ADF	57	Yes		LOL4	Output Low Limit
ADF	58	Yes		BSB4	Standby STP Change
ADF	59	Yes		BOF4	Off Mode STP Change
ADF	60	Yes		DA4	Deviation Alarm Limit
ADF	61	Yes		LSP5	Control Module 5: Local Setpoint
ADF	62	Yes		PB5	Proportional Band
ADF	63	Yes		TI5	Reset Action
ADF	64	Yes		TD5	Rate Action
ADF	65	Yes		HIL5	Output High Limit
ADF	66	Yes		LOL5	Output Low Limit
ADF	67	Yes		BSB5	Standby STP Change
ADF	68	Yes		BOF5	Off Mode STP Change
ADF	69	Yes		DA5	Deviation Alarm Limit
ADF	70	Yes		LSP6	Control Module 6: Local Setpoint
ADF	71	Yes		PB6	Proportional Band
ADF	72	Yes		TI6	Reset Action
ADF	73	Yes		TD6	Rate Action
ADF	74	Yes		HIL6	Output High Limit
ADF	75	Yes		LOL6	Output Low Limit
ADF	76	Yes		BSB6	Standby STP Change
ADF	77	Yes		BOF6	Off Mode STP Change
ADF	78	Yes		DA6	Deviation Alarm Limit
ADF	79	Yes		LSP7	Control Module 7: Local Setpoint
ADF	80	Yes		PB7	Proportional Band
ADF	81	Yes		TI7	Reset Action
ADF	82	Yes		TD7	Rate Action
ADF	83	Yes		HIL7	Output High Limit
ADF	84	Yes		LOL7	Output Low Limit
ADF	85	Yes		BSB7	Standby STP Change
ADF	86	Yes		BOF7	Off Mode STP Change
ADF	87	Yes		DA7	Deviation Alarm Limit
ADF	88	Yes		LSP8	Control Module 8: Local Setpoint
ADF	89	Yes		PB8	Proportional Band
ADF	90	Yes		TI8	Reset Action
ADF	91	Yes		TD8	Rate Action
ADF	92	Yes		HIL8	Output High Limit
ADF	93	Yes		LOL8	Output Low Limit
ADF	94	Yes		BSB8	Standby STP Change

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
ADF	95	Yes		BOF8	Control Module 8: Off Mode STP Change
ADF	96	Yes		DA8	Deviation Alarm Limit
BD	1			LCM1	Output Logic Module 1
BD	2			LCM2	Output Logic Module 2
BD	3			LCM3	Output Logic Module 3
BD	4			LCM4	Output Logic Module 4
BD	5	Yes		DCO1	Digital Constant 1
BD	6	Yes		DCO2	Digital Constant 2
BD	7	Yes		DCO3	Digital Constant 3
BD	8	Yes		DCO4	Digital Constant 4

DX-9100 Extended Digital Controller

Two tables show DX-9100 point mapping. Table 18 shows how DX-9100 points can map to N30 objects. Table 19 provides more detail about DX-9100 points (e.g., tag names, item descriptions, and which points are commandable).

For additional information on mapping to programmable function module items (PMK, PMO, PMA), see *Appendix C* of the *DX-9100 Configuration Guide (LIT-6364030)* in the *System 9100 Technical Manual*.

Table 18: DX-9100 Point Mapping to N30

DX-9100 Network Point Type		N30 Object Type
AI	1 to 72	N2_AI
ADF	1 to 8	
ADI	1 to 72	
PMK	1 to 240	
PMO	1 to 96	
PMA	1 to 96	
AO	1 to 72	N2_AO
ADF	1 to 8	
ADI	1 to 72	
PMK	1 to 240	
PMO	1 to 96	
BI	1 to 72	N2_BI
BD	1 to 32	
LRS	1 to 64	
PML	1 to 96	
BO	1 to 72	N2_BO
BD	1 to 32	
PML	1 to 96	
ADI	1 to 72	N2_PC
PMA	1 to 96	

Table 19: DX-9100 Point Mapping (Detail)

Note: For XPs, the actual range of the AI is AI1 through AI6, and the actual range of the AO is AO7 and AO8.

Network Point Type	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
AI	1			AI1	Analog Input 1
AI	2			AI2	Analog Input 2
AI	3			AI3	Analog Input 3
AI	4			AI4	Analog Input 4
AI	5			AI5	Analog Input 5
AI	6			AI6	Analog Input 6
AI	7			AI7	Analog Input 7
AI	8			AI8	Analog Input 8
AI	9			XT1AI1	Expander 1: Analog Input 1
AI	10			XT1AI2	Analog Input 2
AI	11			XT1AI3	Analog Input 3
AI	12			XT1AI4	Analog Input 4
AI	13			XT1AI5	Analog Input 5
AI	14			XT1AI6	Analog Input 6
AI	15			XT1AI7	Analog Input 7

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
AI	16			XT1AI8	Analog Input 8
AI	17			XT2AI1	Expander 2: Analog Input 1
AI	18			XT2AI2	Analog Input 2
AI	19			XT2AI3	Analog Input 3
AI	20			XT2AI4	Analog Input 4
AI	21			XT2AI5	Analog Input 5
AI	22			XT2AI6	Analog Input 6
AI	23			XT2AI7	Analog Input 7
AI	24			XT2AI8	Analog Input 8
AI	25			XT3AI1	Expander 3: Analog Input 1
AI	26			XT3AI2	Analog Input 2
AI	27			XT3AI3	Analog Input 3
AI	28			XT3AI4	Analog Input 4
AI	29			XT3AI5	Analog Input 5
AI	30			XT3AI6	Analog Input 6
AI	31			XT3AI7	Analog Input 7
AI	31			XT3AI8	Analog Input 8
AI	33			XT4AI1	Expander 4: Analog Input 1
AI	34			XT4AI2	Analog Input 2
AI	35			XT4AI3	Analog Input 3
AI	36			XT4AI4	Analog Input 4
AI	37			XT4AI5	Analog Input 5
AI	38			XT4AI6	Analog Input 6
AI	39			XT4AI7	Analog Input 7
AI	40			XT4AI8	Analog Input 8
AI	41			XT5AI1	Expander 5: Analog Input 1
AI	42			XT5AI2	Analog Input 2
AI	43			XT5AI3	Analog Input 3
AI	44			XT5AI4	Analog Input 4
AI	45			XT5AI5	Analog Input 5
AI	46			XT5AI6	Analog Input 6
AI	47			XT5AI7	Analog Input 7
AI	48			XT5AI8	Analog Input 8
AI	49			XT6AI1	Expander 6: Analog Input 1
AI	50			XT6AI2	Analog Input 2
AI	51			XT6AI3	Analog Input 3
AI	52			XT6AI4	Analog Input 4
AI	53			XT6AI5	Analog Input 5
AI	54			XT6AI6	Analog Input 6
AI	55			XT6AI7	Analog Input 7
AI	56			XT6AI8	Analog Input 8

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
AI	57			XT7AI1	Expander 7: Analog Input 1
AI	58			XT7AI2	Analog Input 2
AI	59			XT7AI3	Analog Input 3
AI	60			XT7AI4	Analog Input 4
AI	61			XT7AI5	Analog Input 5
AI	62			XT7AI6	Analog Input 6
AI	63			XT7AI7	Analog Input 7
AI	64			XT7AI8	Analog Input 8
AI	65			XT8AI1	Expander 8: Analog Input 1
AI	66			XT8AI2	Analog Input 2
AI	67			XT8AI3	Analog Input 3
AI	68			XT8AI4	Analog Input 4
AI	69			XT8AI5	Analog Input 5
AI	70			XT8AI6	Analog Input 6
AI	71			XT8AI7	Analog Input 7
AI	72			XT8AI8	Analog Input 8
BI	1			DI1	Digital Input 1
BI	2			DI2	Digital Input 2
BI	3			DI3	Digital Input 3
BI	5			DI5	Digital Input 5
BI	6			DI6	Digital Input 6
BI	7			DI7	Digital Input 7
BI	8			DI8	Digital Input 8
BI	9			XT1DI1	Expander 1: Digital Input 1
BI	10			XT1DI2	Digital Input 2
BI	11			XT1DI3	Digital Input 3
BI	12			XT1DI4	Digital Input 4
BI	13			XT1DI5	Digital Input 5
BI	14			XT1DI6	Digital Input 6
BI	15			XT1DI7	Digital Input 7
BI	16			XT1DI8	Digital Input 8
BI	17			XT2DI1	Expander 2: Digital Input 1
BI	18			XT2DI2	Digital Input 2
BI	19			XT2DI3	Digital Input 3
BI	20			XT2DI4	Digital Input 4
BI	21			XT2DI5	Digital Input 5
BI	22			XT2DI6	Digital Input 6
BI	23			XT2DI7	Digital Input 7
BI	24			XT2DI8	Digital Input 8
BI	25			XT3DI1	Expander 3: Digital Input 1
BI	26			XT3DI2	Digital Input 2

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
BI	27			XT3DI3	Digital Input 3
BI	28			XT3DI4	Digital Input 4
BI	29			XT3DI5	Digital Input 5
BI	30			XT3DI6	Digital Input 6
BI	31			XT3DI7	Digital Input 7
BI	32			XT3DI8	Digital Input 8
BI	33			XT4DI1	Expander 4: Digital Input 1
BI	34			XT4DI2	Digital Input 2
BI	35			XT4DI3	Digital Input 3
BI	36			XT4DI4	Digital Input 4
BI	37			XT4DI5	Digital Input 5
BI	38			XT4DI6	Digital Input 6
BI	39			XT4DI7	Digital Input 7
BI	40			XT4DI8	Digital Input 8
BI	41			XT5DI1	Expander 5: Digital Input 1
BI	42			XT5DI2	Digital Input 2
BI	43			XT5DI3	Digital Input 3
BI	44			XT5DI4	Digital Input 4
BI	45			XT5DI5	Digital Input 5
BI	47			XT5DI7	Digital Input 7
BI	48			XT5DI8	Digital Input 8
BI	49			XT6DI1	Expander 6: Digital Input 1
BI	50			XT6DI2	Digital Input 2
BI	51			XT6DI3	Digital Input 3
BI	52			XT6DI4	Digital Input 4
BI	53			XT6DI5	Digital Input 5
BI	54			XT6DI6	Digital Input 6
BI	55			XT6DI7	Digital Input 7
BI	56			XT6DI8	Digital Input 8
BI	57			XT7DI1	Expander 7: Digital Input 1
BI	58			XT7DI2	Digital Input 2
BI	59			XT7DI3	Digital Input 3
BI	60			XT7DI4	Digital Input 4
BI	61			XT7DI5	Digital Input 5
BI	62			XT7DI6	Digital Input 6
BI	63			XT7DI7	Digital Input 7
BI	64			XT7DI8	Digital Input 8
BI	65			XT8DI1	Expander 8: Digital Input 1
BI	66			XT8DI2	Digital Input 2
BI	67			XT8DI3	Digital Input 3
BI	68			XT8DI4	Digital Input 4

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
BI	69			XT8DI5	Digital Input 5
BI	70			XT8DI6	Digital Input 6
BI	71			XT8DI7	Digital Input 7
BI	72			XT8DI8	Digital Input 8
AO	1	Yes	Yes	AO1	Analog Output 1
AO	2	Yes	Yes	AO2	Analog Output 2
AO	3	Yes	Yes	AO9	Analog Output 9
AO	4	Yes	Yes	AO10	Analog Output 10
AO	5	Yes	Yes	AO11	Analog Output 11
AO	6	Yes	Yes	AO12	Analog Output 12
AO	7	Yes	Yes	AO13	Analog Output 13
AO	8	Yes	Yes	AO14	Analog Output 14
AO	9	Yes	Yes	XT1AO1	Expander 1: Analog Output 1
AO	10	Yes	Yes	XT1AO2	Analog Output 2
AO	11	Yes	Yes	XT1AO3	Analog Output 3
AO	12	Yes	Yes	XT1AO4	Analog Output 4
AO	13	Yes	Yes	XT1AO5	Analog Output 5
AO	14	Yes	Yes	XT1AO6	Analog Output 6
AO	15	Yes	Yes	XT1AO7	Analog Output 7
AO	16	Yes	Yes	XT1AO8	Analog Output 8
AO	17	Yes	Yes	XT2AO1	Expander 2: Analog Output 1
AO	18	Yes	Yes	XT2AO2	Analog Output 2
AO	19	Yes	Yes	XT2AO3	Analog Output 3
AO	20	Yes	Yes	XT2AO4	Analog Output 4
AO	21	Yes	Yes	XT2AO5	Analog Output 5
AO	22	Yes	Yes	XT2AO6	Analog Output 6
AO	23	Yes	Yes	XT2AO7	Analog Output 7
AO	24	Yes	Yes	XT2AO8	Analog Output 8
AO	25	Yes	Yes	XT3AO1	Expander 3: Analog Output 1
AO	26	Yes	Yes	XT3AO2	Analog Output 2
AO	27	Yes	Yes	XT3AO3	Analog Output 3
AO	28	Yes	Yes	XT3AO4	Analog Output 4
AO	29	Yes	Yes	XT3AO5	Analog Output 5
AO	30	Yes	Yes	XT3AO6	Analog Output 6
AO	31	Yes	Yes	XT3AO7	Analog Output 7
AO	32	Yes	Yes	XT3AO8	Analog Output 8
AO	33	Yes	Yes	XT4AO1	Expander 4: Analog Output 1
AO	34	Yes	Yes	XT4AO2	Analog Output 2
AO	35	Yes	Yes	XT4AO3	Analog Output 3
AO	36	Yes	Yes	XT4AO4	Analog Output 4
AO	37	Yes	Yes	XT4AO5	Analog Output 5

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
AO	38	Yes	Yes	XT4AO6	Analog Output 6
AO	39	Yes	Yes	XT4AO7	Analog Output 7
AO	40	Yes	Yes	XT4AO8	Analog Output 8
AO	41	Yes	Yes	XT5AO1	Expander 5: Analog Output 1
AO	42	Yes	Yes	XT5AO2	Analog Output 2
AO	43	Yes	Yes	XT5AO3	Analog Output 3
AO	44	Yes	Yes	XT5AO4	Analog Output 4
AO	45	Yes	Yes	XT5AO5	Analog Output 5
AO	46	Yes	Yes	XT5AO6	Analog Output 6
AO	47	Yes	Yes	XT5AO7	Analog Output 7
AO	48	Yes	Yes	XT5AO8	Analog Output 8
AO	49	Yes	Yes	XT6AO1	Expander 6: Analog Output 1
AO	50	Yes	Yes	XT6AO2	Analog Output 2
AO	51	Yes	Yes	XT6AO3	Analog Output 3
AO	52	Yes	Yes	XT6AO4	Analog Output 4
AO	53	Yes	Yes	XT6AO5	Analog Output 5
AO	54	Yes	Yes	XT6AO6	Analog Output 6
AO	55	Yes	Yes	XT6AO7	Analog Output 7
AO	56	Yes	Yes	XT6AO8	Analog Output 8
AO	57	Yes	Yes	XT7AO1	Expander 7: Analog Output 1
AO	58	Yes	Yes	XT7AO2	Analog Output 2
AO	59	Yes	Yes	XT7AO3	Analog Output 3
AO	60	Yes	Yes	XT7AO4	Analog Output 4
AO	61	Yes	Yes	XT7AO5	Analog Output 5
AO	62	Yes	Yes	XT7AO6	Analog Output 6
AO	63	Yes	Yes	XT7AO7	Analog Output 7
AO	64	Yes	Yes	XT7AO8	Analog Output 8
AO	65	Yes	Yes	XT8AO1	Expander 8: Analog Output 1
AO	66	Yes	Yes	XT8AO2	Analog Output 2
AO	67	Yes	Yes	XT8AO3	Analog Output 3
AO	68	Yes	Yes	XT8AO4	Analog Output 4
AO	69	Yes	Yes	XT8AO5	Analog Output 5
AO	70	Yes	Yes	XT8AO6	Analog Output 6
AO	71	Yes	Yes	XT8AO7	Analog Output 7
AO	72	Yes	Yes	XT8AO8	Analog Output 8
BO	1	Yes		SOFF	Shut Off Mode
BO	2	Yes		STUP	Start Up Mode
BO	3	Yes	Yes	DO3	Digital Output 3
BO	4	Yes	Yes	DO4	Digital Output 4
BO	5	Yes	Yes	DO5	Digital Output 5
BO	6	Yes	Yes	DO6	Digital Output 6

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
BO	7	Yes	Yes	DO7	Digital Output 7
BO	8	Yes	Yes	DO8	Digital Output 8
BO	9	Yes	Yes	XT1DO1	Expander 1: Digital Output 1
BO	10	Yes	Yes	XT1DO2	Digital Output 2
BO	11	Yes	Yes	XT1DO3	Digital Output 3
BO	12	Yes	Yes	XT1DO4	Digital Output 4
BO	13	Yes	Yes	XT1DO5	Digital Output 5
BO	14	Yes	Yes	XT1DO6	Digital Output 6
BO	15	Yes	Yes	XT1DO7	Digital Output 7
BO	16	Yes	Yes	XT1DO8	Digital Output 8
BO	17	Yes	Yes	XT2DO1	Expander 2: Digital Output 1
BO	18	Yes	Yes	XT2DO2	Digital Output 2
BO	19	Yes	Yes	XT2DO3	Digital Output 3
BO	20	Yes	Yes	XT2DO4	Digital Output 4
BO	21	Yes	Yes	XT2DO5	Digital Output 5
BO	22	Yes	Yes	XT2DO6	Digital Output 6
BO	23	Yes	Yes	XT2DO7	Digital Output 7
BO	24	Yes	Yes	XT2DO8	Digital Output 8
BO	25	Yes	Yes	XT3DO1	Expander 3: Digital Output 1
BO	26	Yes	Yes	XT3DO2	Digital Output 2
BO	27	Yes	Yes	XT3DO3	Digital Output 3
BO	28	Yes	Yes	XT3DO4	Digital Output 4
BO	29	Yes	Yes	XT3DO5	Digital Output 5
BO	30	Yes	Yes	XT3DO6	Digital Output 6
BO	31	Yes	Yes	XT3DO7	Digital Output 7
BO	33	Yes	Yes	XT4DO1	Expander 4: Digital Output 1
BO	34	Yes	Yes	XT4DO2	Digital Output 2
BO	35	Yes	Yes	XT4DO3	Digital Output 3
BO	36	Yes	Yes	XT4DO4	Digital Output 4
BO	37	Yes	Yes	XT4DO5	Digital Output 5
BO	38	Yes	Yes	XT4DO6	Digital Output 6
BO	39	Yes	Yes	XT4DO7	Digital Output 7
BO	40	Yes	Yes	XT4DO8	Digital Output 8
BO	41	Yes	Yes	XT5DO1	Expander 5: Digital Output 1
BO	42	Yes	Yes	XT5DO2	Digital Output 2
BO	43	Yes	Yes	XT5DO3	Digital Output 3
BO	44	Yes	Yes	XT5DO4	Digital Output 4
BO	45	Yes	Yes	XT5DO5	Digital Output 5
BO	46	Yes	Yes	XT5DO6	Digital Output 6
BO	47	Yes	Yes	XT5DO7	Digital Output 7
BO	48	Yes	Yes	XT5DO8	Digital Output 8

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
BO	49	Yes	Yes	XT6DO1	Expander 6: Digital Output 1
BO	50	Yes	Yes	XT6DO2	Digital Output 2
BO	51	Yes	Yes	XT6DO3	Digital Output 3
BO	52	Yes	Yes	XT6DO4	Digital Output 4
BO	53	Yes	Yes	XT6DO5	Digital Output 5
BO	54	Yes	Yes	XT6DO6	Digital Output 6
BO	55	Yes	Yes	XT6DO7	Digital Output 7
BO	56	Yes	Yes	XT6DO8	Digital Output 8
BO	57	Yes	Yes	XT7DO1	Expander 7: Digital Output 1
BO	58	Yes	Yes	XT7DO2	Digital Output 2
BO	59	Yes	Yes	XT7DO3	Digital Output 3
BO	60	Yes	Yes	XT7DO4	Digital Output 4
BO	61	Yes	Yes	XT7DO5	Digital Output 5
BO	62	Yes	Yes	XT7DO6	Digital Output 6
BO	63	Yes	Yes	XT7DO7	Digital Output 7
BO	64	Yes	Yes	XT7DO8	Digital Output 8
BO	65	Yes	Yes	XT8DO1	Expander 8: Digital Output 1
BO	66	Yes	Yes	XT8DO2	Digital Output 2
BO	67	Yes	Yes	XT8DO3	Digital Output 3
BO	68	Yes	Yes	XT8DO4	Digital Output 4
BO	69	Yes	Yes	XT8DO5	Digital Output 5
BO	70	Yes	Yes	XT8DO6	Digital Output 6
BO	71	Yes	Yes	XT8DO7	Digital Output 7
BO	72	Yes	Yes	XT8DO8	Digital Output 8
ADF	1	Yes		ACO1	Analog Constant 1
ADF	3	Yes		ACO3	Analog Constant 3
ADF	4	Yes		ACO4	Analog Constant 4
ADF	5	Yes		ACO5	Analog Constant 5
ADF	6	Yes		ACO6	Analog Constant 6
ADF	7	Yes		ACO7	Analog Constant 7
ADF	8	Yes		ACO8	Analog Constant 8
ADI	1	Yes		CNT1	DI1 Pulse Count
ADI	2	Yes		CNT2	DI2 Pulse Count
ADI	3	Yes		CNT3	DI3 Pulse Count
ADI	4	Yes		CNT4	DI4 Pulse Count
ADI	5	Yes		CNT5	DI5 Pulse Count
ADI	6	Yes		CNT6	DI6 Pulse Count
ADI	7	Yes		CNT7	DI7 Pulse Count
ADI	8	Yes		CNT8	DI8 Pulse Count
ADI	9	Yes		XT1CNT1	Expander 1: DI1 Pulse Count
ADI	10	Yes		XT1CNT2	DI2 Pulse Count

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
ADI	11	Yes		XT1CNT3	DI3 Pulse Count
ADI	12	Yes		XT1CNT4	DI4 Pulse Count
ADI	13	Yes		XT1CNT5	DI5 Pulse Count
ADI	14	Yes		XT1CNT6	DI6 Pulse Count
ADI	15	Yes		XT1CNT7	DI7 Pulse Count
ADI	16	Yes		XT1CNT8	DI8 Pulse Count
ADI	17	Yes		XT2CNT1	Expander 2: DI1 Pulse Count
ADI	18	Yes		XT2CNT2	DI2 Pulse Count
ADI	19	Yes		XT2CNT3	DI3 Pulse Count
ADI	20	Yes		XT2CNT4	DI4 Pulse Count
ADI	21	Yes		XT2CNT5	DI5 Pulse Count
ADI	22	Yes		XT2CNT6	DI6 Pulse Count
ADI	23	Yes		XT2CNT7	DI7 Pulse Count
ADI	24	Yes		XT2CNT8	DI8 Pulse Count
ADI	25	Yes		XT3CNT1	Expander 3: DI1 Pulse Count
ADI	26	Yes		XT3CNT2	DI2 Pulse Count
ADI	27	Yes		XT3CNT3	DI3 Pulse Count
ADI	28	Yes		XT3CNT4	DI4 Pulse Count
ADI	29	Yes		XT3CNT5	DI5 Pulse Count
ADI	30	Yes		XT3CNT6	DI6 Pulse Count
ADI	31	Yes		XT3CNT7	DI7 Pulse Count
ADI	32	Yes		XT3CNT8	DI8 Pulse Count
ADI	33	Yes		XT4CNT1	Expander 4: DI1 Pulse Count
ADI	34	Yes		XT4CNT2	DI2 Pulse Count
ADI	35	Yes		XT4CNT3	DI3 Pulse Count
ADI	37	Yes		XT4CNT5	DI5 Pulse Count
ADI	38	Yes		XT4CNT6	DI6 Pulse Count
ADI	39	Yes		XT4CNT7	DI7 Pulse Count
ADI	40	Yes		XT4CNT8	DI8 Pulse Count
ADI	41	Yes		XT5CNT1	Expander 5: DI1 Pulse Count
ADI	42	Yes		XT5CNT2	DI2 Pulse Count
ADI	43	Yes		XT5CNT3	DI3 Pulse Count
ADI	44	Yes		XT5CNT4	DI4 Pulse Count
ADI	45	Yes		XT5CNT5	DI5 Pulse Count
ADI	46	Yes		XT5CNT6	DI6 Pulse Count
ADI	47	Yes		XT5CNT7	DI7 Pulse Count
ADI	48	Yes		XT5CNT8	DI8 Pulse Count
ADI	49	Yes		XT6CNT1	Expander 6: DI1 Pulse Count
ADI	50	Yes		XT6CNT2	DI2 Pulse Count
ADI	51	Yes		XT6CNT3	DI3 Pulse Count
ADI	52	Yes		XT6CNT4	DI4 Pulse Count

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
ADI	53	Yes		XT6CNT5	DI5 Pulse Count
ADI	54	Yes		XT6CNT6	DI6 Pulse Count
ADI	55	Yes		XT6CNT7	DI7 Pulse Count
ADI	56	Yes		XT6CNT8	DI8 Pulse Count
ADI	57	Yes		XT7CNT1	Expander 7: DI1 Pulse Count
ADI	58	Yes		XT7CNT2	DI2 Pulse Count
ADI	59	Yes		XT7CNT3	DI3 Pulse Count
ADI	60	Yes		XT7CNT4	DI4 Pulse Count
ADI	61	Yes		XT7CNT5	DI5 Pulse Count
ADI	62	Yes		XT7CNT6	DI6 Pulse Count
ADI	63	Yes		XT7CNT7	DI7 Pulse Count
ADI	64	Yes		XT7CNT8	DI8 Pulse Count
ADI	65	Yes		XT8CNT1	Expander 8: DI1 Pulse Count
ADI	66	Yes		XT8CNT2	DI2 Pulse Count
ADI	67	Yes		XT8CNT3	DI3 Pulse Count
ADI	68	Yes		XT8CNT4	DI4 Pulse Count
ADI	69	Yes		XT8CNT5	DI5 Pulse Count
ADI	70	Yes		XT8CNT6	DI6 Pulse Count
ADI	71	Yes		XT8CNT7	DI7 Pulse Count
ADI	72	Yes		XT8CNT8	DI8 Pulse Count
BD	1	Yes		DCO1	Logic Constant 1
BD	2	Yes		DCO2	Logic Constant 2
BD	3	Yes		DCO3	Logic Constant 3
BD	4	Yes		DCO4	Logic Constant 4
BD	5	Yes		DCO5	Logic Constant 5
BD	7	Yes		DCO7	Logic Constant 7
BD	8	Yes		DCO8	Logic Constant 8
BD	9	Yes		DCO9	Logic Constant 9
BD	10	Yes		DCO10	Logic Constant 10
BD	11	Yes		DCO11	Logic Constant 11
BD	12	Yes		DCO12	Logic Constant 12
BD	13	Yes		DCO13	Logic Constant 13
BD	14	Yes		DCO14	Logic Constant 14
BD	15	Yes		DCO15	Logic Constant 15
BD	16	Yes		DCO16	Logic Constant 16
BD	17	Yes		DCO17	Logic Constant 17
BD	18	Yes		DCO18	Logic Constant 18
BD	19	Yes		DCO19	Logic Constant 19
BD	20	Yes		DCO20	Logic Constant 20
BD	21	Yes		DCO21	Logic Constant 21
BD	22	Yes		DCO22	Logic Constant 22
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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
BD	23	Yes		DCO23	Logic Constant 23
BD	24	Yes		DCO24	Logic Constant 24
BD	25	Yes		DCO25	Logic Constant 25
BD	26	Yes		DCO26	Logic Constant 26
BD	27	Yes		DCO27	Logic Constant 27
BD	28	Yes		DCO28	Logic Constant 28
BD	29	Yes		DCO29	Logic Constant 29
BD	30	Yes		DCO30	Logic Constant 30
BD	31	Yes		DCO31	Logic Constant 31
BD	32	Yes		DCO32	Logic Constant 32
LRS	1			LRS1	Logic Result 1
LRS	2			LRS2	Logic Result 2
LRS	3			LRS3	Logic Result 3
LRS	4			LRS4	Logic Result 4
LRS	5			LRS5	Logic Result 5
LRS	6			LRS6	Logic Result 6
LRS	7			LRS7	Logic Result 7
LRS	8			LRS8	Logic Result 8
LRS	9			LRS9	Logic Result 9
LRS	10			LRS10	Logic Result 10
LRS	11			LRS11	Logic Result 11
LRS	12			LRS12	Logic Result 12
LRS	13			LRS13	Logic Result 13
LRS	14			LRS14	Logic Result 14
LRS	15			LRS15	Logic Result 15
LRS	17			LRS17	Logic Result 17
LRS	18			LRS18	Logic Result 18
LRS	19			LRS19	Logic Result 19
LRS	20			LRS20	Logic Result 20
LRS	21			LRS21	Logic Result 21
LRS	22			LRS22	Logic Result 22
LRS	23			LRS23	Logic Result 23
LRS	24			LRS24	Logic Result 24
LRS	25			LRS25	Logic Result 25
LRS	26			LRS26	Logic Result 26
LRS	27			LRS27	Logic Result 27
LRS	28			LRS28	Logic Result 28
LRS	29			LRS29	Logic Result 29
LRS	30			LRS30	Logic Result 30
LRS	31			LRS31	Logic Result 31
LRS	32			LRS32	Logic Result 32

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
LRS	33			LRS33	Logic Result 33
LRS	34			LRS34	Logic Result 34
LRS	35			LRS35	Logic Result 35
LRS	36			LRS36	Logic Result 36
LRS	37			LRS37	Logic Result 37
LRS	38			LRS38	Logic Result 38
LRS	39			LRS39	Logic Result 39
LRS	40			LRS40	Logic Result 40
LRS	41			LRS41	Logic Result 41
LRS	42			LRS42	Logic Result 42
LRS	43			LRS43	Logic Result 43
LRS	44			LRS44	Logic Result 44
LRS	45			LRS45	Logic Result 45
LRS	46			LRS46	Logic Result 46
LRS	47			LRS47	Logic Result 47
LRS	48			LRS48	Logic Result 48
LRS	49			LRS49	Logic Result 49
LRS	50			LRS50	Logic Result 50
LRS	51			LRS51	Logic Result 51
LRS	52			LRS52	Logic Result 52
LRS	53			LRS53	Logic Result 53
LRS	54			LRS54	Logic Result 54
LRS	55			LRS55	Logic Result 55
LRS	56			LRS56	Logic Result 56
LRS	57			LRS57	Logic Result 57
LRS	59			LRS59	Logic Result 59
LRS	60			LRS60	Logic Result 60
LRS	61			LRS61	Logic Result 61
LRS	62			LRS62	Logic Result 62
LRS	63			LRS63	Logic Result 63
LRS	64			LRS64	Logic Result 64
PMK	1	Yes		PM1K1	Module 1 Constant: K1
PMK	2	Yes		PM1K2	K2
PMK	3	Yes		PM1K3	K3
PMK	4	Yes		PM1K4	K4
PMK	5	Yes		PM1K5	K5
PMK	6	Yes		PM1K6	K6
PMK	7	Yes		PM1K7	K7
PMK	8	Yes		PM1K8	K8
PMK	9	Yes		PM1K9	K9
PMK	10	Yes		PM1K10	K10

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PMK	11	Yes		PM1K11	K11
PMK	12	Yes		PM1K12	K12
PMK	13	Yes		PM1K13	K13
PMK	14	Yes		PM1K14	K14
PMK	15	Yes		PM1K15	K15
PMK	16	Yes		PM1K16	K16
PMK	17	Yes		PM1K17	K17
PMK	18	Yes		PM1K18	K18
PMK	19	Yes		PM1K19	K19
PMK	20	Yes		PM1K20	K20
PMK	21	Yes		PM2K1	Module 2 Constant: K1
PMK	22	Yes		PM2K2	K2
PMK	23	Yes		PM2K3	K3
PMK	24	Yes		PM2K4	K4
PMK	25	Yes		PM2K5	K5
PMK	26	Yes		PM2K6	K6
PMK	27	Yes		PM2K7	K7
PMK	28	Yes		PM2K8	K8
PMK	29	Yes		PM2K9	K9
PMK	30	Yes		PM2K10	K10
PMK	31	Yes		PM2K11	K11
PMK	32	Yes		PM2K12	K12
PMK	33	Yes		PM2K13	K13
PMK	34	Yes		PM2K14	K14
PMK	35	Yes		PM2K15	K15
PMK	36	Yes		PM2K16	K16
PMK	37	Yes		PM2K17	Module 2 Constant: K17
PMK	38	Yes		PM2K18	K18
PMK	39	Yes		PM2K19	K19
PMK	40	Yes		PM2K20	K20
PMK	41	Yes		PM3K1	Module 3 Constant: K1
PMK	42	Yes		PM3K2	K2
PMK	43	Yes		PM3K3	K3
PMK	44	Yes		PM3K4	K4
PMK	45	Yes		PM3K5	K5
PMK	46	Yes		PM3K6	K6
PMK	47	Yes		PM3K7	K7
PMK	48	Yes		PM3K8	K8
PMK	49	Yes		PM3K9	K9
PMK	50	Yes		PM3K10	K10
PMK	51	Yes		PM3K11	K11

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PMK	52	Yes		PM3K12	K12
PMK	53	Yes		PM3K13	K13
PMK	54	Yes		PM3K14	K14
PMK	55	Yes		PM3K15	K15
PMK	56	Yes		PM3K16	K16
PMK	57	Yes		PM3K17	K17
PMK	58	Yes		PM3K18	K18
PMK	59	Yes		PM3K19	K19
PMK	60	Yes		PM3K20	K20
PMK	61	Yes		PM4K1	Module 4 Constant: K1
PMK	62	Yes		PM4K2	K2
PMK	63	Yes		PM4K3	K3
PMK	64	Yes		PM4K4	K4
PMK	65	Yes		PM4K5	K5
PMK	66	Yes		PM4K6	K6
PMK	67	Yes		PM4K7	K7
PMK	68	Yes		PM4K8	K8
PMK	69	Yes		PM4K9	K9
PMK	70	Yes		PM4K10	K10
PMK	71	Yes		PM4K11	K11
PMK	72	Yes		PM4K12	K12
PMK	73	Yes		PM4K13	K13
PMK	74	Yes		PM4K14	K14
PMK	75	Yes		PM4K15	K15
PMK	76	Yes		PM4K16	K16
PMK	78	Yes		PM4K18	Module 4 Constant: K18
PMK	79	Yes		PM4K19	K19
PMK	80	Yes		PM4K20	K20
PMK	81	Yes		PM5K1	Module 5 Constant: K1
PMK	82	Yes		PM5K2	K2
PMK	83	Yes		PM5K3	K3
PMK	84	Yes		PM5K4	K4
PMK	85	Yes		PM5K5	K5
PMK	86	Yes		PM5K6	K6
PMK	87	Yes		PM5K7	K7
PMK	88	Yes		PM5K8	K8
PMK	89	Yes		PM5K9	K9
PMK	90	Yes		PM5K10	K10
PMK	91	Yes		PM5K11	K11
PMK	92	Yes		PM5K12	K12
PMK	93	Yes		PM5K13	K13

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PMK	94	Yes		PM5K14	K14
PMK	95	Yes		PM5K15	K15
PMK	96	Yes		PM5K16	K16
PMK	97	Yes		PM5K17	K17
PMK	98	Yes		PM5K18	K18
PMK	99	Yes		PM5K19	K19
PMK	100	Yes		PM5K20	K20
PMK	101	Yes		PM6K1	Module 6 Constant: K1
PMK	102	Yes		PM6K2	K2
PMK	103	Yes		PM6K3	K3
PMK	104	Yes		PM6K4	K4
PMK	105	Yes		PM6K5	K5
PMK	106	Yes		PM6K6	K6
PMK	107	Yes		PM6K7	K7
PMK	108	Yes		PM6K8	K8
PMK	109	Yes		PM6K9	K9
PMK	110	Yes		PM6K10	K10
PMK	111	Yes		PM6K11	K11
PMK	112	Yes		PM6K12	K12
PMK	113	Yes		PM6K13	K13
PMK	114	Yes		PM6K14	K14
PMK	115	Yes		PM6K15	K15
PMK	116	Yes		PM6K16	K16
PMK	117	Yes		PM6K17	K17
PMK	118	Yes		PM6K18	Module 6 Constant: K18
PMK	119	Yes		PM6K19	K19
PMK	120	Yes		PM6K20	K20
PMK	121	Yes		PM7K1	Module 7 Constant: K1
PMK	122	Yes		PM7K2	K2
PMK	123	Yes		PM7K3	K3
PMK	124	Yes		PM7K4	K4
PMK	125	Yes		PM7K5	K5
PMK	126	Yes		PM7K6	K6
PMK	127	Yes		PM7K7	K7
PMK	128	Yes		PM7K8	K8
PMK	129	Yes		PM7K9	K9
PMK	130	Yes		PM7K10	K10
PMK	131	Yes		PM7K11	K11
PMK	132	Yes		PM7K12	K12
PMK	133	Yes		PM7K13	K13
PMK	113	Yes		PM7K14	K14

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PMK	135	Yes		PM7K15	K15
PMK	136	Yes		PM7K16	K16
PMK	137	Yes		PM7K17	K17
PMK	138	Yes		PM7K18	K18
PMK	139	Yes		PM7K19	K19
PMK	140	Yes		PM7K20	K20
PMK	141	Yes		PM8K1	Module 8 Constant: K1
PMK	142	Yes		PM8K2	K2
PMK	143	Yes		PM8K3	K3
PMK	144	Yes		PM8K4	K4
PMK	145	Yes		PM8K5	K5
PMK	146	Yes		PM8K6	K6
PMK	147	Yes		PM8K7	K7
PMK	148	Yes		PM8K8	K8
PMK	149	Yes		PM8K9	K9
PMK	150	Yes		PM8K10	K10
PMK	151	Yes		PM8K11	K11
PMK	152	Yes		PM8K12	K12
PMK	153	Yes		PM8K13	K13
PMK	154	Yes		PM8K14	K14
PMK	155	Yes		PM8K15	K15
PMK	156	Yes		PM8K16	K16
PMK	157	Yes		PM8K17	K17
PMK	158	Yes		PM8K18	K18
PMK	159	Yes		PM8K19	Module 8 Constant: K19
PMK	160	Yes		PM8K20	K20
PMK	161	Yes		PM9K1	Module 9 Constant: K1
PMK	162	Yes		PM9K2	K2
PMK	163	Yes		PM9K3	K3
PMK	164	Yes		PM9K4	K4
PMK	165	Yes		PM9K5	K5
PMK	166	Yes		PM9K6	K6
PMK	167	Yes		PM9K7	K7
PMK	168	Yes		PM9K8	K8
PMK	169	Yes		PM9K9	K9
PMK	170	Yes		PM9K10	K10
PMK	171	Yes		PM9K11	K11
PMK	172	Yes		PM9K12	K12
PMK	173	Yes		PM9K13	K13
PMK	174	Yes		PM9K14	K14
PMK	175	Yes		PM9K15	K15

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PMK	176	Yes		PM9K16	K16
PMK	177	Yes		PM9K17	K17
PMK	178	Yes		PM9K18	18
PMK	179	Yes		PM9K19	K19
PMK	180	Yes		PM9K20	K20
PMK	181	Yes		PM10K1	Module 10 Constant: K1
PMK	182	Yes		PM10K2	K2
PMK	183	Yes		PM10K3	K3
PMK	184	Yes		PM10K4	K4
PMK	185	Yes		PM10K5	K5
PMK	186	Yes		PM10K6	K6
PMK	187	Yes		PM10K7	K7
PMK	188	Yes		PM10K8	K8
PMK	189	Yes		PM10K9	K9
PMK	190	Yes		PM10K10	K10
PMK	191	Yes		PM10K11	K11
PMK	192	Yes		PM10K12	K12
PMK	193	Yes		PM10K13	K13
PMK	194	Yes		PM10K14	K14
PMK	195	Yes		PM10K15	K15
PMK	196	Yes		PM10K16	K16
PMK	197	Yes		PM10K17	K17
PMK	198	Yes		PM10K18	K18
PMK	199	Yes		PM10K19	K19
PMK	200	Yes		PM10K20	Module 10 Constant: K20
PMK	201	Yes		PM11K1	Module 11 Constant: K1
PMK	202	Yes		PM11K2	K2
PMK	203	Yes		PM11K3	K3
PMK	204	Yes		PM11K4	K4
PMK	205	Yes		PM11K5	K5
PMK	206	Yes		PM11K6	K6
PMK	207	Yes		PM11K7	K7
PMK	208	Yes		PM11K8	K8
PMK	209	Yes		PM11K9	K9
PMK	210	Yes		PM11K10	K10
PMK	211	Yes		PM11K11	K11
PMK	212	Yes		PM11K12	K12
PMK	213	Yes		PM11K13	K13
PMK	214	Yes		PM11K14	K14
PMK	215	Yes		PM11K15	K15
PMK	216	Yes		PM11K16	K16

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PMK	217	Yes		PM11K17	K17
PMK	218	Yes		PM11K18	K18
PMK	219	Yes		PM11K19	K19
PMK	220	Yes		PM11K20	K20
PMK	221	Yes		PM12K1	Module 12 Constant: K1
PMK	222	Yes		PM12K2	K2
PMK	223	Yes		PM12K3	K3
PMK	224	Yes		PM12K4	K4
PMK	225	Yes		PM12K5	K5
PMK	226	Yes		PM12K6	K6
PMK	227	Yes		PM12K7	K7
PMK	228	Yes		PM12K8	K8
PMK	229	Yes		PM12K9	K9
PMK	230	Yes		PM12K10	K10
PMK	231	Yes		PM12K11	K11
PMK	232	Yes		PM12K12	K12
PMK	233	Yes		PM12K13	K13
PMK	234	Yes		PM12K14	K14
PMK	235	Yes		PM12K15	K15
PMK	236	Yes		PM12K16	K16
PMK	237	Yes		PM12K17	K17
PMK	238	Yes		PM12K18	K18
PMK	239	Yes		PM12K19	K19
PMK	240	Yes		PM12K20	K20
PMO	1	Yes	Yes	PM1OU1	Module 1 Output: Channel 1
PMO	2	Yes	Yes	PM1OU2	Channel 2
PMO	3	Yes	Yes	PM1OU3	Channel 3
PMO	4	Yes	Yes	PM1OU4	Channel 4
PMO	5	Yes	Yes	PM1OU5	Channel 5
PMO	6	Yes	Yes	PM1OU6	Channel 6
PMO	7	Yes	Yes	PM1OU7	Channel 7
PMO	8	Yes	Yes	PM1OU8	Channel 8
PMO	9	Yes	Yes	PM2OU1	Module 2 Output: Channel 1
PMO	10	Yes	Yes	PM2OU2	Channel 2
PMO	11	Yes	Yes	PM2OU3	Channel 3
PMO	12	Yes	Yes	PM2OU4	Channel 4
PMO	13	Yes	Yes	PM2OU5	Channel 5
PMO	14	Yes	Yes	PM2OU6	Channel 6
PMO	15	Yes	Yes	PM2OU7	Channel 7
PMO	16	Yes	Yes	PM2OU8	Channel 8
PMO	17	Yes	Yes	PM3OU1	Module 3 Output: Channel 1

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PMO	18	Yes	Yes	PM3OU2	Channel 2
PMO	19	Yes	Yes	PM3OU3	Channel 3
PMO	20	Yes	Yes	PM3OU4	Channel 4
PMO	21	Yes	Yes	PM3OU5	Channel 5
PMO	22	Yes	Yes	PM3OU6	Channel 6
PMO	23	Yes	Yes	PM3OU7	Channel 7
PMO	24	Yes	Yes	PM3OU8	Channel 8
PMO	25	Yes	Yes	PM4OU1	Module 4 Output: Channel 1
PMO	26	Yes	Yes	PM4OU2	Channel 2
PMO	27	Yes	Yes	PM4OU3	Channel 3
PMO	28	Yes	Yes	PM4OU4	Channel 4
PMO	29	Yes	Yes	PM4OU5	Channel 5
PMO	30	Yes	Yes	PM4OU6	Channel 6
PMO	31	Yes	Yes	PM4OU7	Channel 7
PMO	32	Yes	Yes	PM4OU8	Channel 8
PMO	33	Yes	Yes	PM5OU1	Module 5 Output: Channel 1
PMO	34	Yes	Yes	PM5OU2	Channel 2
PMO	35	Yes	Yes	PM5OU3	Channel 3
PMO	36	Yes	Yes	PM5OU4	Channel 4
PMO	37	Yes	Yes	PM5OU5	Channel 5
PMO	38	Yes	Yes	PM5OU6	Channel 6
PMO	39	Yes	Yes	PM5OU7	Channel 7
PMO	40	Yes	Yes	PM5OU8	Channel 8
PMO	41	Yes	Yes	PM6OU1	Module 6 Output: Channel 1
PMO	42	Yes	Yes	PM6OU2	Channel 2
PMO	43	Yes	Yes	PM6OU3	Channel 3
PMO	44	Yes	Yes	PM6OU4	Channel 4
PMO	45	Yes	Yes	PM6OU5	Channel 5
PMO	46	Yes	Yes	PM6OU6	Channel 6
PMO	47	Yes	Yes	PM6OU7	Channel 7
PMO	48	Yes	Yes	PM6OU8	Channel 8
PMO	49	Yes	Yes	PM7OU1	Module 7 Output: Channel 1
PMO	50	Yes	Yes	PM7OU2	Channel 2
PMO	51	Yes	Yes	PM7OU3	Channel 3
PMO	52	Yes	Yes	PM7OU4	Channel 4
PMO	53	Yes	Yes	PM7OU5	Channel 5
PMO	54	Yes	Yes	PM7OU6	Channel 6
PMO	55	Yes	Yes	PM7OU7	Channel 7
PMO	56	Yes	Yes	PM7OU8	Channel 8
PMO	57	Yes	Yes	PM8OU1	Module 8 Output: Channel 1
PMO	58	Yes	Yes	PM8OU2	Channel 2

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description	
PMO	59	Yes	Yes	PM8OU3		Channel 3
PMO	60	Yes	Yes	PM8OU4		Channel 4
PMO	61	Yes	Yes	PM8OU5		Channel 5
PMO	62	Yes	Yes	PM8OU6		Channel 6
PMO	63	Yes	Yes	PM8OU7		Channel 7
PMO	64	Yes	Yes	PM8OU8		Channel 8
PMO	65	Yes	Yes	PM9OU1	Module 9 Output:	Channel 1
PMO	66	Yes	Yes	PM9OU2		Channel 2
PMO	67	Yes	Yes	PM9OU3		Channel 3
PMO	68	Yes	Yes	PM9OU4		Channel 4
PMO	69	Yes	Yes	PM9OU5		Channel 5
PMO	70	Yes	Yes	PM9OU6		Channel 6
PMO	71	Yes	Yes	PM9OU7		Channel 7
PMO	72	Yes	Yes	PM9OU8		Channel 8
PMO	73	Yes	Yes	PM10OU1	Module 10 Output:	Channel 1
PMO	74	Yes	Yes	PM10OU2		Channel 2
PMO	75	Yes	Yes	PM10OU3		Channel 3
PMO	76	Yes	Yes	PM10OU4		Channel 4
PMO	77	Yes	Yes	PM10OU5		Channel 5
PMO	78	Yes	Yes	PM10OU6		Channel 6
PMO	79	Yes	Yes	PM10OU7		Channel 7
PMO	80	Yes	Yes	PM10OU8		Channel 8
PMO	81	Yes	Yes	PM11OU1	Module 11 Output:	Channel 1
PMO	82	Yes	Yes	PM11OU2		Channel 2
PMO	83	Yes	Yes	PM11OU3		Channel 3
PMO	84	Yes	Yes	PM11OU4		Channel 4
PMO	85	Yes	Yes	PM11OU5		Channel 5
PMO	86	Yes	Yes	PM11OU6		Channel 6
PMO	87	Yes	Yes	PM11OU7		Channel 7
PMO	88	Yes	Yes	PM11OU8		Channel 8
PMO	89	Yes	Yes	PM12OU1	Module 12 Output:	Channel 1
PMO	90	Yes	Yes	PM12OU2		Channel 2
PMO	91	Yes	Yes	PM12OU3		Channel 3
PMO	92	Yes	Yes	PM12OU4		Channel 4
PMO	93	Yes	Yes	PM12OU5		Channel 5
PMO	94	Yes	Yes	PM12OU6		Channel 6
PMO	95	Yes	Yes	PM12OU7		Channel 7
PMO	96	Yes	Yes	PM12OU8		Channel 8
PML	1	Yes	Yes	PM1DO1	Module 1 Logic Output:	Channel 1
PML	2	Yes	Yes	PM1DO2		Channel 2
PML	3	Yes	Yes	PM1DO3		Channel 3

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description	
PML	4	Yes	Yes	PM1DO4		Channel 4
PML	5	Yes	Yes	PM1DO5		Channel 5
PML	6	Yes	Yes	PM1DO6		Channel 6
PML	7	Yes	Yes	PM1DO7		Channel 7
PML	8	Yes	Yes	PM1DO8		Channel 8
PML	9	Yes	Yes	PM2DO1	Module 2 Logic Output:	Channel 1
PML	10	Yes	Yes	PM2DO2		Channel 2
PML	11	Yes	Yes	PM2DO3		Channel 3
PML	12	Yes	Yes	PM2DO4		Channel 4
PML	13	Yes	Yes	PM2DO5		Channel 5
PML	14	Yes	Yes	PM2DO6		Channel 6
PML	15	Yes	Yes	PM2DO7		Channel 7
PML	16	Yes	Yes	PM2DO8		Channel 8
PML	17	Yes	Yes	PM3DO1	Module 3 Logic Output:	Channel 1
PML	18	Yes	Yes	PM3DO2		Channel 2
PML	19	Yes	Yes	PM3DO3		Channel 3
PML	20	Yes	Yes	PM3DO4		Channel 4
PML	21	Yes	Yes	PM3DO5		Channel 5
PML	22	Yes	Yes	PM3DO6		Channel 6
PML	23	Yes	Yes	PM3DO7		Channel 7
PML	24	Yes	Yes	PM3DO8		Channel 8
PML	25	Yes	Yes	PM4DO1	Module 4 Logic Output:	Channel 1
PML	26	Yes	Yes	PM4DO2		Channel 2
PML	27	Yes	Yes	PM4DO3		Channel 3
PML	28	Yes	Yes	PM4DO4		Channel 4
PML	29	Yes	Yes	PM4DO5		Channel 5
PML	30	Yes	Yes	PM4DO6		Channel 6
PML	31	Yes	Yes	PM4DO7		Channel 7
PML	32	Yes	Yes	PM4DO8		Channel 8
PML	33	Yes	Yes	PM5DO1	Module 5 Logic Output:	Channel 1
PML	34	Yes	Yes	PM5DO2		Channel 2
PML	35	Yes	Yes	PM5DO3		Channel 3
PML	36	Yes	Yes	PM5DO4		Channel 4
PML	37	Yes	Yes	PM5DO5		Channel 5
PML	38	Yes	Yes	PM5DO6		Channel 6
PML	39	Yes	Yes	PM5DO7		Channel 7
PML	40	Yes	Yes	PM5DO8		Channel 8
PML	41	Yes	Yes	PM6DO1	Module 6 Logic Output:	Channel 1
PML	42	Yes	Yes	PM6DO2		Channel 2
PML	43	Yes	Yes	PM6DO3		Channel 3
PML	44	Yes	Yes	PM6DO4		Channel 4

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PML	45	Yes	Yes	PM6DO5	Channel 5
PML	46	Yes	Yes	PM6DO6	Channel 6
PML	47	Yes	Yes	PM6DO7	Channel 7
PML	48	Yes	Yes	PM6DO8	Channel 8
PML	49	Yes	Yes	PM7DO1	Module 7 Logic Output: Channel 1
PML	50	Yes	Yes	PM7DO2	Channel 2
PML	51	Yes	Yes	PM7DO3	Channel 3
PML	52	Yes	Yes	PM7DO4	Channel 4
PML	53	Yes	Yes	PM7DO5	Channel 5
PML	54	Yes	Yes	PM7DO6	Channel 6
PML	55	Yes	Yes	PM7DO7	Channel 7
PML	56	Yes	Yes	PM7DO8	Channel 8
PML	57	Yes	Yes	PM8DO1	Module 8 Logic Output: Channel 1
PML	58	Yes	Yes	PM8DO2	Channel 2
PML	59	Yes	Yes	PM8DO3	Channel 3
PML	60	Yes	Yes	PM8DO4	Channel 4
PML	61	Yes	Yes	PM8DO5	Channel 5
PML	62	Yes	Yes	PM8DO6	Channel 6
PML	63	Yes	Yes	PM8DO7	Channel 7
PML	64	Yes	Yes	PM8DO8	Channel 8
PML	65	Yes	Yes	PM9DO1	Module 9 Logic Output: Channel 1
PML	66	Yes	Yes	PM9DO2	Channel 2
PML	67	Yes	Yes	PM9DO3	Channel 3
PML	68	Yes	Yes	PM9DO4	Channel 4
PML	69	Yes	Yes	PM9DO5	Channel 5
PML	70	Yes	Yes	PM9DO6	Channel 6
PML	71	Yes	Yes	PM9DO7	Channel 7
PML	72	Yes	Yes	PM9DO8	Channel 8
PML	73	Yes	Yes	PM10DO1	Module 10 Logic Output: Channel 1
PML	74	Yes	Yes	PM10DO2	Channel 2
PML	75	Yes	Yes	PM10DO3	Channel 3
PML	76	Yes	Yes	PM10DO4	Channel 4
PML	77	Yes	Yes	PM10DO5	Channel 5
PML	78	Yes	Yes	PM10DO6	Channel 6
PML	79	Yes	Yes	PM10DO7	Channel 7
PML	80	Yes	Yes	PM10DO8	Channel 8
PML	81	Yes	Yes	PM11DO1	Module 11 Logic Output: Channel 1
PML	82	Yes	Yes	PM11DO2	Channel 2
PML	83	Yes	Yes	PM11DO3	Channel 3
PML	84	Yes	Yes	PM11DO4	Channel 4
PML	85	Yes	Yes	PM11DO5	Channel 5

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description	
PML	86	Yes	Yes	PM11DO6		Channel 6
PML	87	Yes	Yes	PM11DO7		Channel 7
PML	88	Yes	Yes	PM11DO8		Channel 8
PML	89	Yes	Yes	PM12DO1	Module 12 Logic Output:	Channel 1
PML	90	Yes	Yes	PM12DO2		Channel 2
PML	91	Yes	Yes	PM12DO3		Channel 3
PML	92	Yes	Yes	PM12DO4		Channel 4
PML	93	Yes	Yes	PM12DO5		Channel 5
PML	94	Yes	Yes	PM12DO6		Channel 6
PML	95	Yes	Yes	PM12DO7		Channel 7
PML	96	Yes	Yes	PM12DO8		Channel 8
PMA	1	Yes		PM1AC1	Module 1 Accumulator:	Channel 1
PMA	2	Yes		PM1AC2		Channel 2
PMA	3	Yes		PM1AC3		Channel 3
PMA	4	Yes		PM1AC4		Channel 4
PMA	5	Yes		PM1AC5		Channel 5
PMA	6	Yes		PM1AC6		Channel 6
PMA	7	Yes		PM1AC7		Channel 7
PMA	8	Yes		PM1AC8		Channel 8
PMA	9	Yes		PM2AC1	Module 2 Accumulator:	Channel 1
PMA	10	Yes		PM2AC2		Channel 2
PMA	11	Yes		PM2AC3		Channel 3
PMA	12	Yes		PM2AC4		Channel 4
PMA	13	Yes		PM2AC5		Channel 5
PMA	14	Yes		PM2AC6		Channel 6
PMA	15	Yes		PM2AC7		Channel 7
PMA	16	Yes		PM2AC8		Channel 8
PMA	17	Yes		PM3AC1	Module 3 Accumulator:	Channel 1
PMA	18	Yes		PM3AC2		Channel 2
PMA	19	Yes		PM3AC3		Channel 3
PMA	20	Yes		PM3AC4		Channel 4
PMA	21	Yes		PM3AC5		Channel 5
PMA	22	Yes		PM3AC6		Channel 6
PMA	23	Yes		PM3AC7		Channel 7
PMA	24	Yes		PM3AC8		Channel 8
PMA	25	Yes		PM4AC1	Module 4 Accumulator:	Channel 1
PMA	26	Yes		PM4AC2		Channel 2
PMA	27	Yes		PM4AC3		Channel 3
PMA	28	Yes		PM4AC4		Channel 4
PMA	29	Yes		PM4AC5		Channel 5
PMA	30	Yes		PM4AC6		Channel 6

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PMA	31	Yes		PM4AC7	Channel 7
PMA	32	Yes		PM4AC8	Channel 8
PMA	33	Yes		PM5AC1	Module 5 Accumulator: Channel 1
PMA	34	Yes		PM5AC2	Channel 2
PMA	35	Yes		PM5AC3	Channel 3
PMA	36	Yes		PM5AC4	Channel 4
PMA	37	Yes		PM5AC5	Channel 5
PMA	38	Yes		PM5AC6	Channel 6
PMA	39	Yes		PM5AC7	Channel 7
PMA	40	Yes		PM5AC8	Channel 8
PMA	41	Yes		PM6AC1	Module 6 Accumulator: Channel 1
PMA	42	Yes		PM6AC2	Channel 2
PMA	43	Yes		PM6AC3	Channel 3
PMA	44	Yes		PM6AC4	Channel 4
PMA	45	Yes		PM6AC5	Channel 5
PMA	46	Yes		PM6AC6	Channel 6
PMA	47	Yes		PM6AC7	Channel 7
PMA	48	Yes		PM6AC8	Channel 8
PMA	49	Yes		PM7AC1	Module 7 Accumulator: Channel 1
PMA	50	Yes		PM7AC2	Channel 2
PMA	51	Yes		PM7AC3	Channel 3
PMA	52	Yes		PM7AC4	Channel 4
PMA	53	Yes		PM7AC5	Channel 5
PMA	54	Yes		PM7AC6	Channel 6
PMA	55	Yes		PM7AC7	Channel 7
PMA	56	Yes		PM7AC8	Channel 8
PMA	57	Yes		PM8AC1	Module 8 Accumulator: Channel 1
PMA	58	Yes		PM8AC2	Channel 2
PMA	59	Yes		PM8AC3	Channel 3
PMA	60	Yes		PM8AC4	Channel 4
PMA	61	Yes		PM8AC5	Channel 5
PMA	62	Yes		PM8AC6	Channel 6
PMA	63	Yes		PM8AC7	Channel 7
PMA	64	Yes		PM8AC8	Channel 8
PMA	65	Yes		PM9AC1	Module 9 Accumulator: Channel 1
PMA	66	Yes		PM9AC2	Channel 2
PMA	67	Yes		PM9AC3	Channel 3
PMA	68	Yes		PM9AC4	Channel 4
PMA	69	Yes		PM9AC5	Channel 5
PMA	70	Yes		PM9AC6	Channel 6
PMA	71	Yes		PM9AC7	Channel 7

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Network Point Type (Cont.)	Network Point Address	Command Allowed	Override Status	Tag Name	Item Description
PMA	72	Yes		PM9AC8	Channel 8
PMA	73	Yes		PM10AC1	Module 10 Accumulator: Channel 1
PMA	74	Yes		PM10AC2	Channel 2
PMA	75	Yes		PM10AC3	Channel 3
PMA	76	Yes		PM10AC4	Channel 4
PMA	77	Yes		PM10AC5	Channel 5
PMA	78	Yes		PM10AC6	Channel 6
PMA	79	Yes		PM10AC7	Channel 7
PMA	80	Yes		PM10AC8	Channel 8
PMA	81	Yes		PM11AC1	Module 11 Accumulator: Channel 1
PMA	82	Yes		PM11AC2	Channel 2
PMA	83	Yes		PM11AC3	Channel 3
PMA	84	Yes		PM11AC4	Channel 4
PMA	85	Yes		PM11AC5	Channel 5
PMA	86	Yes		PM11AC6	Channel 6
PMA	87	Yes		PM11AC7	Channel 7
PMA	88	Yes		PM11AC8	Channel 8
PMA	89	Yes		PM12AC1	Module 12 Accumulator: Channel 1
PMA	90	Yes		PM12AC2	Channel 2
PMA	91	Yes		PM12AC3	Channel 3
PMA	92	Yes		PM12AC4	Channel 4
PMA	93	Yes		PM12AC5	Channel 5
PMA	94	Yes		PM12AC6	Channel 6
PMA	95	Yes		PM12AC7	Channel 7
PMA	96	Yes		PM12AC8	Channel 8

Extension Module (XTM and XT)

Two tables show point mapping for the XTM or XT.

Table 20 shows how XTM or XT points can map to N30 objects.

Table 21 provides more detail about the XTM and XT points (for example, tag names, item descriptions, and which points are commandable).

Notes: Override Status is not supported for any points in the XTM or XT, and the Manual Status of Outputs is available only from the XTM.

These tables are used for XTM-105 or XT-9100 modules on the N2 Bus. For XTM-905 or XT-9100 modules on a DX-9100 XT Bus, refer to the DX-9100 tables (Table 18 and Table 19).

Table 20: XTM (or XT) Point Mapping to N30

Network Point Type	Network Point Address	Command Allowed	Override Status	Can Map to N30 Objects:	Description
AI	1-8		No	N2_AI	
BI	1-16		No	N2_BI	
AO	1-8	Yes	No	N2_AO	
BO	1-16	Yes	No	N2_BO	
ADI	1-8	Yes	No	N2_AI, N2_PC, N2_AO	Writes restricted to 0-32767. Only AO points are commandable in N30.
BD	1-24		No	N2_BI	Auto/Manual Flags for Outputs

Table 21: XTM (or XT) Point Mapping (Detail)

Network Point Type	Network Point Address	Command Allowed	Tag Name	Item Description
AI	1		AI1	XP0: Analog Input 1
AI	2		AI2	Analog Input 2
AI	3		AI3	Analog Input 3
AI	4		AI4	Analog Input 4
AI	5		AI5	Analog Input 5
AI	6		AI6	Analog Input 6
AI	7		AI7	Analog Input 7
AI	8		AI8	Analog Input 8
BI	1		1DI1-1	XP1: Binary Input 1
BI	2		1DI1-2	Binary Input 2
BI	3		1DI1-3	Binary Input 3
BI	4		1DI1-4	Binary Input 4
BI	5		1DI1-5	Binary Input 5
BI	6		1DI1-6	Binary Input 6
BI	7		1DI1-7	Binary Input 7
BI	8		1DI1-8	Binary Input 8
BI	9		2DI2-1	XP2: Binary Input 1
BI	10		2DI2-2	Binary Input 2
BI	11		2DI2-3	Binary Input 3
BI	12		2DI2-4	Binary Input 4
BI	13		2DI2-5	Binary Input 5
BI	14		2DI2-6	Binary Input 6
BI	15		2DI2-7	Binary Input 7
BI	16		2DI2-8	Binary Input 8
AO	1	Yes	AO1	XP0: Analog Output 1
AO	2	Yes	AO2	Analog Output 2

Continued on next page . . .

Network Point Type (Cont.)	Network Point Address	Command Allowed	Tag Name	Item Description
AO	3	Yes	AO3	Analog Output 3
AO	4	Yes	AO4	Analog Output 4
AO	5	Yes	AO5	Analog Output 5
AO	6	Yes	AO6	Analog Output 6
AO	7	Yes	AO7	Analog Output 7
AO	8	Yes	AO8	Analog Output 8
BO	1	Yes	1DO1-1	XP1: Binary Output 1
BO	2	Yes	1DO1-2	Binary Output 2
BO	3	Yes	1DO1-3	Binary Output 3
BO	4	Yes	1DO1-4	Binary Output 4
BO	5	Yes	1DO1-5	Binary Output 5
BO	6	Yes	1DO1-6	Binary Output 6
BO	7	Yes	1DO1-7	Binary Output 7
BO	8	Yes	1DO1-8	Binary Output 8
BO	9	Yes	2DO2-1	XP2: Binary Output 1
BO	10	Yes	2DO2-2	Binary Output 2
BO	11	Yes	2DO2-3	Binary Output 3
BO	12	Yes	2DO2-4	Binary Output 4
BO	13	Yes	2DO2-5	Binary Output 5
BO	14	Yes	2DO2-6	Binary Output 6
BO	15	Yes	2DO2-7	Binary Output 7
BO	16	Yes	2DO2-8	Binary Output 8
ADI	1	Yes	CNT1	XTS: DI1 Pulse Count
ADI	2	Yes	CNT2	DI2 Pulse Count
ADI	3	Yes	CNT3	DI3 Pulse Count
ADI	4	Yes	CNT4	DI4 Pulse Count
ADI	5	Yes	CNT5	DI5 Pulse Count
ADI	6	Yes	CNT6	DI6 Pulse Count
ADI	7	Yes	CNT7	DI7 Pulse Count
ADI	8	Yes	CNT8	DI8 Pulse Count
The following Tag Names are available only in the XTM:				
BD	1		1DOM1-1	XP1: Binary Output 1 Manual Status
BD	2		1DOM1-2	Binary Output 2 Manual Status
BD	3		1DOM1-3	Binary Output 3 Manual Status
BD	4		1DOM1-4	Binary Output 4 Manual Status
BD	5		1DOM1-5	Binary Output 5 Manual Status
BD	6		1DOM1-6	Binary Output 6 Manual Status
BD	7		1DOM1-7	Binary Output 7 Manual Status
BD	8		1DOM1-8	Binary Output 8 Manual Status
BD	9		2DOM2-1	XP2: Binary Output 1 Manual Status
BD	10		2DOM2-2	Binary Output 2 Manual Status
BD	11		2DOM2-3	Binary Output 3 Manual Status
Continued on next page . . .				

Network Point Type (Cont.)	Network Point Address	Command Allowed	Tag Name	Item Description
BD	12		2DOM2-4	Binary Output 4 Manual Status
BD	13		2DOM2-5	Binary Output 5 Manual Status
BD	14		2DOM2-6	Binary Output 6 Manual Status
BD	15		2DOM2-7	Binary Output 7 Manual Status
BD	16		2DOM2-8	Binary Output 8 Manual Status
BD	17		AOM-1	XP0: Analog Output 1 Manual Status
BD	18		AOM-2	Analog Output 2 Manual Status
BD	19		AOM-3	Analog Output 3 Manual Status
BD	20		AOM-4	Analog Output 4 Manual Status
BD	21		AOM-5	Analog Output 5 Manual Status
BD	22		AOM-6	Analog Output 6 Manual Status
BD	23		AOM-7	Analog Output 7 Manual Status
BD	24		AOM-8	Analog Output 8 Manual Status

TEC1100

When adding the TEC1100 to an N30, define the TEC1100 as Controller Type VND (Vendor Device). Table 22 describes TEC to N30 object mapping below.

Table 22: VND Point Mapping to an N30 (TEC-1100 Thermostat)

Point Name	Network Point Type/Address	Command Allowed	N30 Object	Override Range
Room Temp	ADI-1		N2 AI	0 to 48°C (28 to 124°F)
Outdoor Temp	ADI-2	Yes	N2 AI	-48 to 48°C (-54 to 124°F)
Heating SP	ADI-3	Yes	N2 AO	0 to 48°C (28 to 100°F)
Cooling SP	ADI-4	Yes	N2 AO	0 to 48 °C (28 to 100°F)
Setback Heating SP	ADI-5	Yes	N2 AO	0 to 48°C (28 to 100°F)
Setback Cooling SP	ADI-6	Yes	N2 AO	0 to 48°C (28 to 100°F)
Minimum Heat SP	ADI-7	Yes	N2 AO	0 to 48° C (28 to 100°F)
Maximum Heat SP	ADI-8	Yes	N2 AO	0 to 48° C (28 to 100°F)
Minimum Cool SP	ADI-9	Yes	N2 AO	0 to 48° C (28 to 100°F)
Maximum Cool SP	ADI-10	Yes	N2 AO	0 to 48° C (28 to 100°F)
Fan	BD-1	Yes	N2 BO	0 = Off/Auto, 1 = On/MAN
Mode	BD-2	Yes	N2 MSO	0 = Off, 1 = Cool, 2 = Heat, 3 = Auto, 4 = E Ht Pump 'O'
Occupancy	BD-3	Yes	N2 BO	0 = Unoccupied, 1 = Occupied
W1 State-Heating	BD-4		N2 BI	0 = Off, 1 = On
W2 State-Heat	BD-5		N2 BI	0 = Off, 1 = On
Y1 State-Cooling	BD-6		N2 BI	0 = Off, 1 = On

Continued on next page . . .

Point Name	Network Point Type/Address	Command Allowed	N30 Object	Override Range
Y2 State-Cooling	BD-7		N2 BI	0 = Off, 1 = On
G State-Fan	BD-8		N2 BI	0 = Off, 1 = On
Temp Units	BD-9	Yes	N2 BO	0 = °C, 1 = °F
Wrench BI	BI-1		N2 BI	0 = Normal, 1 = Alarm
Temp Alarm	BI-2		N2 BI	0 = Normal, 1 = Alarm
Filter BI	BI-3		N2 BI	0 = Normal, 1 = Alarm

TEC2100

When adding the TEC2100 to an N30, define the TEC1100 as Controller Type VND (Vendor Device). Table 23 describes TEC to N30 object mapping.

Table 23: VND Point Mapping to an N30 (TEC-2100 Thermostat)

Point Name	Network Point Type/Address	Command Allowed	NAE Object	Override Range
Room Temp	ADI-1	Yes	N2 AI	0 to 50°C (28 to 122F)
AuxTemp/Outdoor Temp	ADI-2	Yes	N2 AI	-40 to 50°C (-40 to 122F)
Heating SP	ADI-3	Yes	N2 AO	4.5 to 32°C (40 to 90°F)
Cooling SP	ADI-4	Yes	N2 AO	12 to 37°C (54 to 100°F)
Setback Heating SP	ADI-5	Yes	N2 AO	4.5 to 32°C (40 to 90°F)
Setback Cooling SP	ADI-6	Yes	N2 AO	12 to 37°C (54 to 100°F)
Minimum Heat SP	ADI-7		N2 AI	4.5°C (40°F)
Maximum Heat SP	ADI-8	Yes	N2 AO	4.5 to 32°C (40 to 90°F)
Minimum Cool SP	ADI-9	Yes	N2 AO	12 to 37°C (54 to 100°F)
Maximum Cool SP	ADI-10		N2 AI	37°C (100°F)
Fan	BD-1	Yes	N2 BO	0 = Auto, 1 = On/Man
Mode	BD-2	Yes	N2 MSO	0 = Off, 1 = Cool, 2 = Heat, 3 = Auto, 4 = E Ht (Auxiliary Heat)
Occupancy	BD-3	Yes	N2 BO	0 = Unoccupied, 1 = Occupied
W1 State	BD-4		N2 BI	0 = Off, 1 = On
W2 State	BD-5		N2 BI	0 = Off, 1 = On
Y1 State	BD-6		N2 BI	0 = Off, 1 = On
Y2 State	BD-7		N2 BI	0 = Off, 1 = On
G State-Fan	BD-8		N2 BI	0 = Off, 1 = On
Temp Units	BD-9	Yes	N2 BO	0 = °C, 1 = °F
Occupancy Override	BD-10		N2 BI	0 = No Override, 1 = Override
DI1	BI-1		N2 BI	0 = Off, 1 = On
Temp Alarm	BI-2		N2 BI	0 = Normal, 1 = Alarm
DI2	BI-3		N2 BI	0 = Off, 1 = On



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