

# **GATEWAY**

## **Protocol Converters for Toshiba PLCs**



**Temperature  
Controllers**

**Motor  
Protection  
Relays**



**GATEWAY with Toshiba T1-40 PLC**

**CAN WE TALK?**

**Everyone Always Wants to Know  
What Everyone Else is Doing**



**Higher Level Controller  
Computer  
DCS  
PLC**

**Adjustable  
Speed Drives**



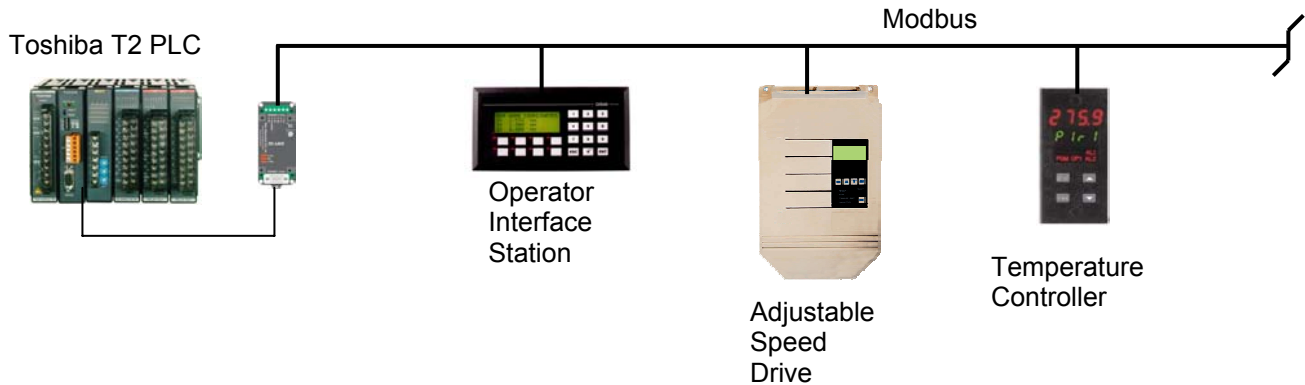
**Don't Let Anyone Work Alone!**

## ◆ Description

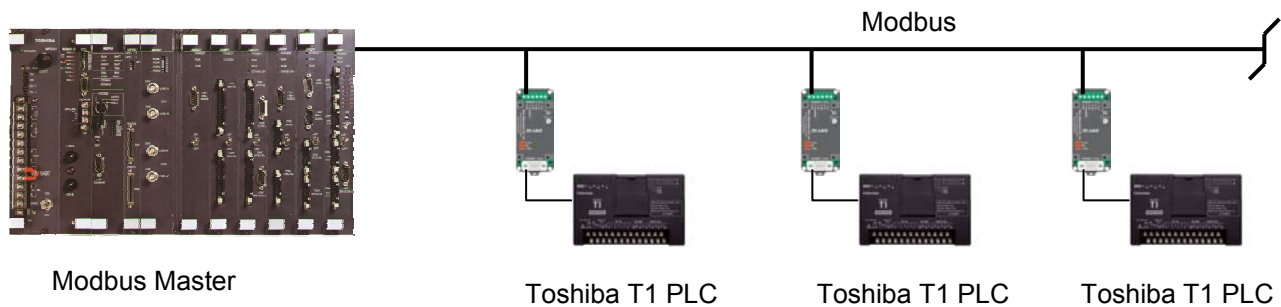
Gateway is a protocol converter that allows any device with a modbus RTU protocol to talk to a Toshiba T-Series PLC. In some cases Gateway allows the Toshiba PLC to communicate directly with other devices using the other device's native protocol. Gateway setup software is used to map the registers between the other devices/controllers to registers in the Toshiba PLC.

## ◆ Applications

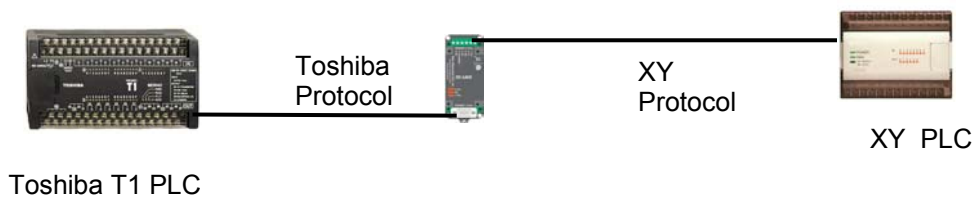
### Toshiba PLC as Master on Modbus Network:



### Toshiba PLC as Slaves on Modbus Network:



### Toshiba PLC to Other PLC Connection:



**We Can Talk Now!**

## ◆ Gateway Modes

There are two communications ports on the Gateway, labeled PLC1 and PLC2. Each port can be configured for either RS232 or RS485 operation. Gateway can communicate through either the T-Series RS232 programming port or the RS485 computer link port.

## ◆ Gateway Setup

Gateway is setup using simple MS Windows setup software. The software allows devices/registers from one device to be mapped to devices/registers of the other device. For Modbus, the 400001 numbered holding registers can be mapped directly to D data registers in the Toshiba PLC.

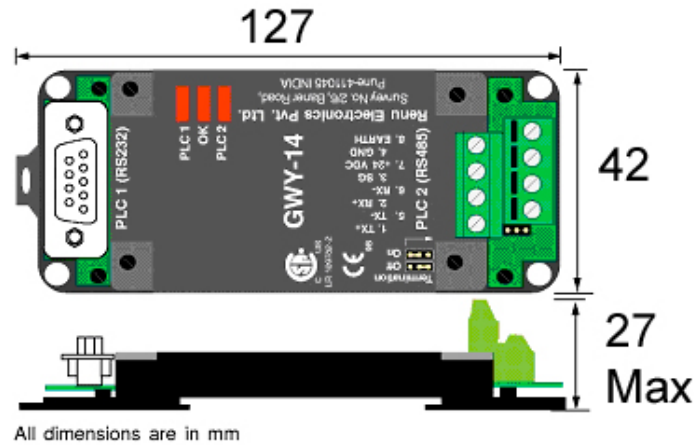
Block No.	# Words	Source PLC	Source ID	Source Address	Destination PLC	Destination ID	Destination Address	Repeat...	Comment
1	5	Toshiba T Serie...	1	D0101	Modbus	3	400001	1	Move Toshiba Registers to PID Cntr
2	3	Modbus	1	400020	Toshiba T Serie...	1	D0000	1	Read Temp Controller Registers to T1.

In the above example, 5 data registers in the T1 PLC starting at D101 are written into PID controller modbus registers starting with holding register 400001. 3 Holding registers in the PID controller are written into the data registers of the T1 starting at D0 (D0 –D2). It is also possible to control the priority and frequency of the data transfer using the Gateway setup software.

## ◆ Specifications

Power Supply:	24 VDC +/- 5 % (50 ma MAX.) No Fuse inside 5 VDC +/- 5 % FROM PLC (120 ma MAX.)
Communication:	Two ports as follows: Com 1: RS232C/RS485 Com 2: RS232C/RS485
Status LEDs:	PLC1 LED STATUS LED PLC2 LED
Temperature:	Operating: 0 to 60 °C Storage: - 40 to 90 °C
Humidity:	10% to 90% (Non condensing)
Immunity to ESD:	Level 3 as per IEC1000-4-2
Immunity to Transients:	Level 3 as per IEC1000-4-4
Radiated Susceptibility:	Level 3 as per IEC1000-4-3
Emissions:	EN55011 CISPR A
Dimensions:	97mm(W) X 15.mm (H) X 42mm(D) DIN RAIL mounting available
Weight:	100 gm Approx.

## ◆ Dimensions



Mounting is via Din Rail or Through Hole

## ◆ Order Information

<u>Part Number</u>	<u>Description</u>
GWY-02	Gateway Protocol Converter, RS232/RS485, Powered from PLC, includes 50cm cable for connection to T1 programming port.
GWY-08	Gateway Protocol Converter, RS485/RS485, Requires 24 Vdc Power.
CNV-01-02-2-0	RS232 to RS422/RS485 Converter, 2 wire / 4 wire.
SC-Y-019A-00	Y Cable, Connects Gateway to T1 and PC for downloading Gateway Program.
SC-Y-019A-00	Y Cable, Connects Gateway to T2 and PC for downloading Gateway Program.
SC-G-019A-00	Cable, Connects Gateway to T1 programming port, 2m.
SC-G-019B-00	Cable, Connects Gateway to T2 programming port, 2m.

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