ACCULINK 3161 DSU/CSU

QUICK REFERENCE

Document No. 3161-A2-GL11-40

PARADYNE™

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ACCULINK 3161 DSU/CSU
Quick Reference

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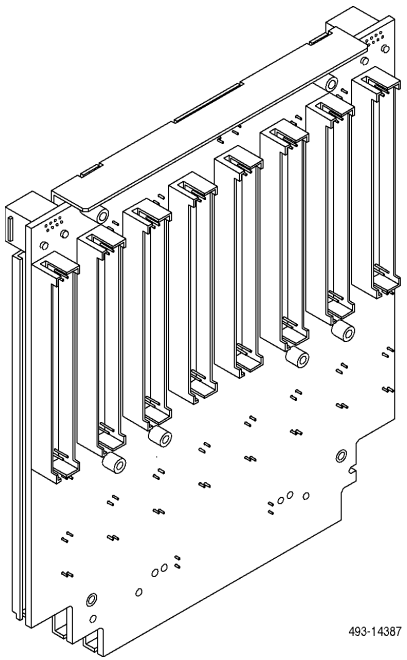
Quick Start Procedure

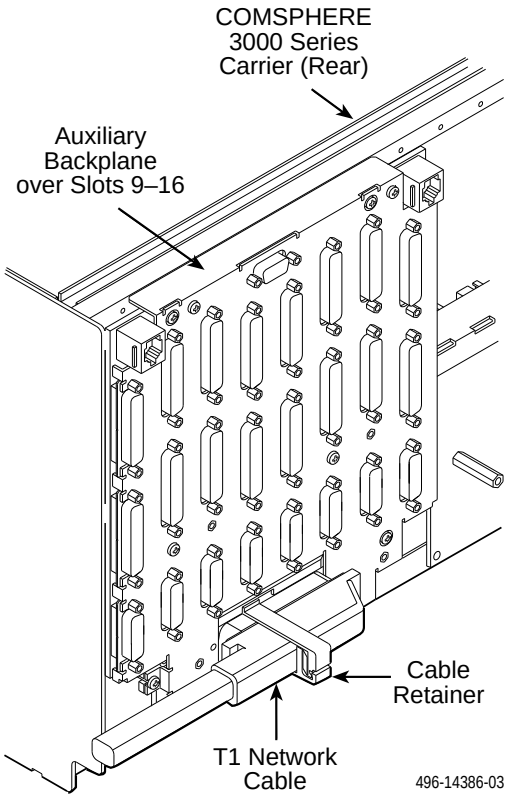
The following procedure is for experienced DSU/CSU users who are familiar with the 3161 DSU/CSU installation process and have no special requirements for their application. See the *ACCULINK 316x Data Service Unit/Channel Service Unit Operator's Guide* (3160-A2-GB21) for more information. A copy is included with the Auxiliary Backplane.

1. Install the Auxiliary Backplane onto the 3000 Series Carrier. See the *ACCULINK 3151 CSU and 3161 DSU/CSU General Information Guide* (3100-A2-GK40) for installation procedures.



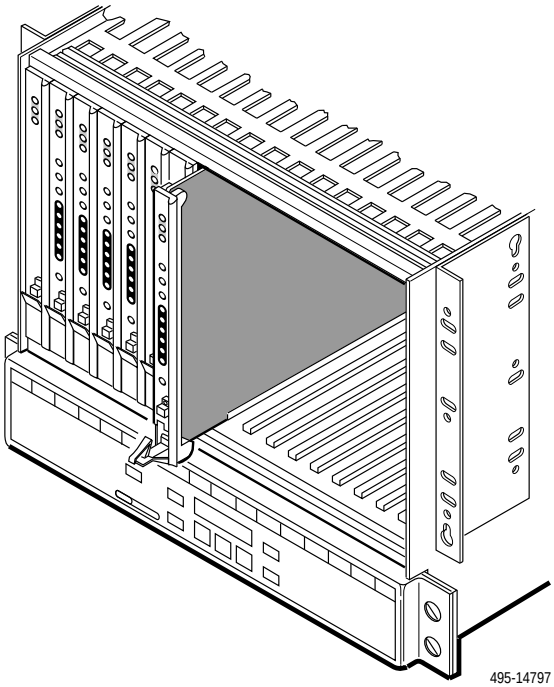
2. Attach the DTE cable (DB15) and/or port cables (DB25) to the appropriate connectors on the Auxiliary Backplane. See the *COMSPHERE 3000 Series Carrier Installation Manual* (3000-A2-GA31) for detailed cable and connector information. Connect the other end of the DTE cable to the customer premises equipment.

3. Attach the network cable to the Auxiliary Backplane using either a 50-pin cable or the T1 Network Interface Adapter. Connect the other end of the network cable to the connection provided by the telephone company.



4. Turn on the power to the 3000 Series Carrier.

5. Insert the DSU/CSU circuit card into the appropriate slot in the carrier. The power-up self-test begins.



6. If you intend to use front panel emulation, connect the cable from the PC to Port 2 on the Auxiliary Backplane using the COM port adapter and COM-port-to-PC cable.
7. If you do not intend to use the DTE Drop/Insert T1 port, disable it using the configuration procedures in Chapter 3, *Operation*, and Appendix C, *Configuration Options*, of the *ACCULINK 316x Data Service Unit/Channel Service Unit Operator's Guide* (3160-A2-GB21). (The default setting for this port is **Enabled**.)
8. The Factory 1 configuration for ESF framing format and B8ZS line coding format is the default configuration and is appropriate for most networks. If this configuration does not work for you, try the Factory 2 configuration for D4 framing format and AMI line coding format. To further customize configuration options, refer to *Changing Configuration Options* in Chapter 3, *Operation*, and Appendix C, *Configuration Options*, in the *ACCULINK 316x Data Service Unit/Channel Service Unit Operator's Guide*.
9. During the power-up self-test, the **FAIL** LED flashes, then all LEDs blink twice. When the test is complete, verify that the DSU/CSU is functional by observing that the **OK**, **NETWORK SIG**, and **DTE SIG** LEDs are lit.
10. Configure the ports and channels you intend to use and assign channels to the network interface.

Configuration Options

Configuration options are accessed from the Cnfig branch of the front panel menu.

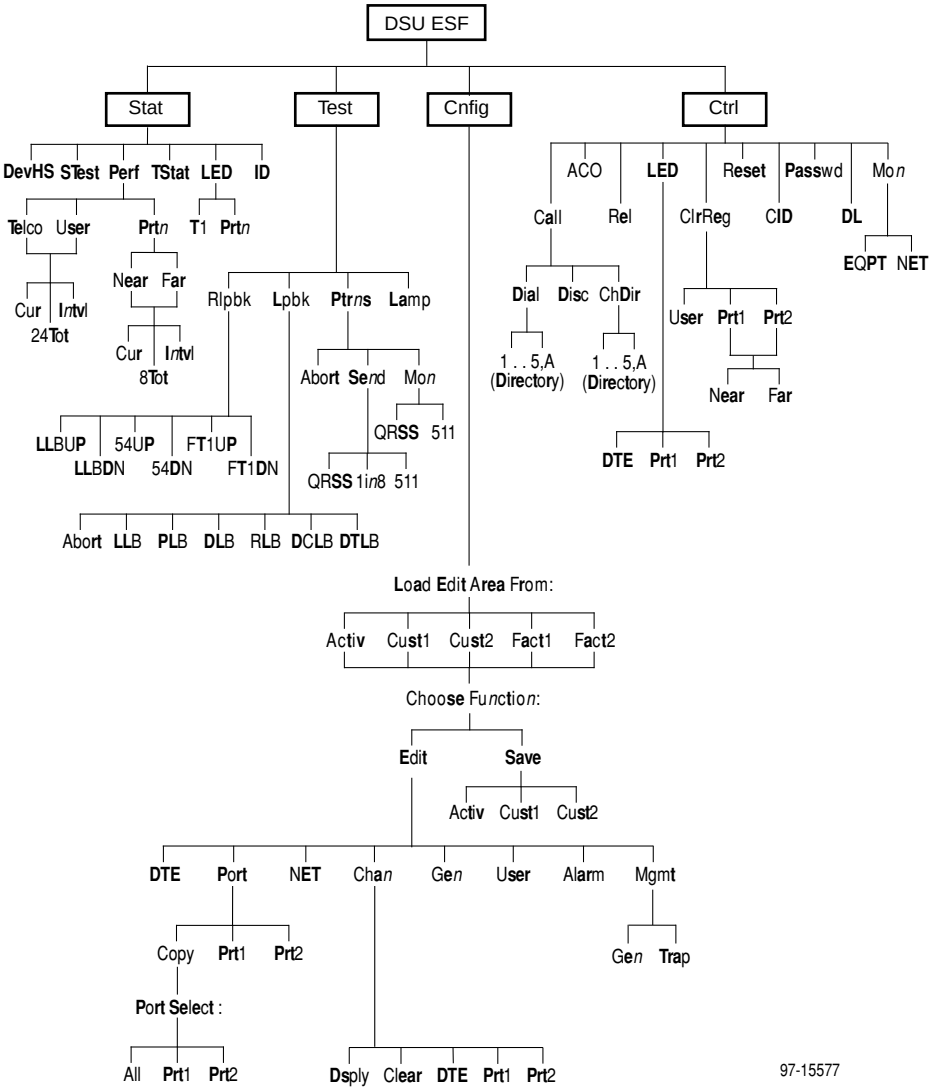


Table 1. DTE Interface Configuration Options

Option	Factory 1	Factory 2	Comments/Description
DTE Port:	**Enab**	**Enab**	Enables the use of the DTE Drop/Insert port.
	Disab	Disab	
DTE Framing:	D4	**D4**	Selects D4 or ESF framing format.
	ESF	ESF	
DTE Coding:	AMI	**AMI**	Selects AMI or B8ZS line coding format.
	B8ZS	B8ZS	
Equal: (DTE Line Equalizer)	**0–133**	**0–133**	Provides selectable extended DTE range capability.
	133–266	133–266	
	266–399	266–399	
	399–533	399–533	
	533–655	533–655	
Extrn DLB: (External DTE Loopback)	Enab	Enab	Allows control of DLB on external contact closure.
	Disab	**Disab**	
Send Ones:	**Enab**	**Enab**	Sends all ones on channels allocated to the network T1 on LOS, LOF, or AIS.
	Disab	Disab	

Table 2. Port Configuration Options (1 of 3)

Option	Factory 1	Factory 2	Comments/Description
Port Type:	**E530**	E530	Selects the port type: EIA-530A, V.35, RS449, or X.21.
	V.35	**V.35**	
	RS449	RS449	
	X.21	X.21	
Base Rate:	**Nx64**	**Nx64**	Enables the port to either Nx56 or Nx64 rates.
	Nx56	Nx56	
Net DCLB:	**Disab**	Disab	Network-initiated DCLB, allows DCLB to be controlled by inband V.54 or FT1 (ANSI) codes.
	V.54	V.54	
	FT1	FT1	
	Both	**Both**	

Table 2. Port Configuration Options (2 of 3)

Option	Factory 1	Factory 2	Comments/Description
Port LB:	**Disab**	Disab	Port-initiated Loopbacks, allows Loopbacks to be initiated through the port by the external DTE.
	DTLB	DTLB	
	DCLB	DCLB	
	Both	**Both**	
All Ones:	Disab	Disab	All ones sent to network (DTE) T1 when DTR or RTS interrupted.
	DTR	DTR	
	RTS	RTS	
	Both	**Both**	
Rcv Yellow: (Received Yellow)	None	None	Data port remains enabled, or is disabled, on receiving Yellow on network T1.
	Halt	**Halt**	
Tx Clock:	**Int**	**Int**	Selects whether the transmitted data clock is internal (TXC) or external (XTXC).
	Ext	Ext	
InvertTxC: (Invert Tx Clock)	Enab	Enab	Selects phase inversion of the transmit clock (TXC).
	Disab	**Disab**	
InvertData:	Enab	Enab	Allows the data on the port to be inverted.
	Disab	**Disab**	
EDL:	Enab	Enab	Specifies whether the Embedded Data Link is enabled.
	Disab	**Disab**	
Err Rate: (Excessive Error Rate)	**10E–4**	**10E–4**	Selects the error rate threshold for Excessive Error Rate Alarm.
	10E–5	10E–5	
	10E–6	10E–6	
	10E–7	10E–7	
	10E–8	10E–8	
	10E–9	10E–9	
Near-end:	**Disab**	**Disab**	Specifies whether the device will maintain near-end performance statistics.
	Maint	Maint	
	Send	Send	
	Both	Both	

Table 2. Port Configuration Options (3 of 3)

Option	Factory 1	Factory 2	Comments/Description
Far-end:	**Disab**	**Disab**	Specifies whether the device will maintain far-end performance statistics.
	Maint	Maint	
Mgmt Link:	Enab	Enab	Specifies whether the EDL Management Link is enabled.
	Disab	**Disab**	

Table 3. Network Interface Configuration Options

Option	Factory 1	Factory 2	Comments/Description
NET Framing:	D4	**D4**	Selects D4 or ESF framing format.
	ESF	ESF	
NET Coding:	AMI	**AMI**	Selects AMI or B8ZS line coding format.
	B8ZS	B8ZS	
LBO:	**0.0**	**0.0**	Provides Line Build Out in dB.
	–7.5	–7.5	
	–15	–15	
	–22.5	–22.5	
ANSI PRM:	Enab	Enab	Sends ANSI Performance Report Messages.
	Disab	**Disab**	
Mgmt Link:	Enab	Enab	Specifies whether the FDL's Management Link is enabled.
	Disab	**Disab**	
NET LLB:	**Enab**	**Enab**	Network-initiated LLB allows LLB to be controlled by inband LLB codes.
	Disab	Disab	
NET PLB:	**Enab**	**Enab**	Network-initiated PLB allows PLB to be controlled by FDL PLB messages.
	Disab	Disab	
BitStuff:	**62411**	**62411**	Provides enforcement of ones density protection per AT&T TR 62411, ANSI T1-403, and FCC Part 68 Technical Publication.
	Part68	Part68	
	Disab	Disab	
Circuit Ident:	Edit	Edit	Specifies the transmission vendor's circuit identifier.
	Clear	**Clear**	

Table 4. DTE Drop/Insert Port Channel Configuration Options

Line 1 Displays:	Line 2 Displays:	Meaning	Comments/Description
N1 N2 N3 ..... N24:	**—**	**Unassigned**	Function key under the channel (N1, N2, etc.) selects the DTE channel to assign (D1, D2, ... D24, or –).
	D1, D2 ... D24	Channel assigned to this DTE channel	
	Prt1 Prt2 Prt3 Prt4	Channel assigned to port 1,2,3, or 4	
D1 D2 D3 ..... D24:	Data	Data Channel	Function key under the channel (D1, D2, etc.) selects either Data or RBS.
	RBS	**Voice Channel**	

Table 5. Data Port Channel Configuration Options (1 of 2)

Option	Factory 1	Factory 2	Comments/Description
Assign To:	**NET**	**NET**	Assigns this port to channels on the Network or DSX-1 T1 interface, or to another port.
	DTE	DTE	
	Prt*n*	Prt*n*	
Assign By:	**Block**	**Block**	Determines how channels are assigned: contiguous blocks, ACAMI or individual channels.
	ACAMI	ACAMI	
	Chan	Chan	
Option	**Factory 1**	**Factory 2**	**Comments/Description**
Port Rate:	64 (56) 128 (112) 192 (168) 256 (224) 320 (280) **384 (336)** 448 (392) 512 (448) 576 (504) 640 (560) 704 (616) 768 (672) 832 (728) 896 (784) 960 (840) 1024 (896) 1088 (952) 1152 (1008) 1216 (1064) 1280 (1120) 1344 (1176) 1408 (1232) 1472 (1288) 1536 (1344)	64 (56) 128 (112) 192 (168) 256 (224) 320 (280) **384 (336)** 448 (392) 512 (448) 576 (504) 640 (560) 704 (616) 768 (672) 832 (728) 896 (784) 960 (840) 1024 (896) 1088 (952) 1152 (1008) 1216 (1064) 1280 (1120) 1344 (1176) 1408 (1232) 1472 (1288) 1536 (1344)	Selects the data rate for the port. The possible rates depend on whether the port is configured for Nx56 or Nx64. This configuration option only appears if the “Assigned By” configuration option is Block or ACAMI.

Table 5. Data Port Channel Configuration Options (2 of 2)

Option	Factory 1	Factory 2	Comments/Description
Start At:	Clear	Clear	Clears (unassigns) channels for this port.
	N1 (D1) N2 (D2) N3 (D3) N4 (D4) N5 (D5) N6 (D6) N7 (D7) N8 (D8) N9 (D9) N10 (D10) N11 (D11) N12 (D12) N13 (D13) N14 (D14) N15 (D15) N16 (D16) N17 (D17) N18 (D18) N19 (D19) N20 (D20) N21 (D21) N22 (D22) N23 (D23) N24 (D24)	N1 (D1) N2 (D2) N3 (D3) N4 (D4) N5 (D5) N6 (D6) N7 (D7) N8 (D8) N9 (D9) N10 (D10) N11 (D11) N12 (D12) N13 (D13) N14 (D14) N15 (D15) N16 (D16) N17 (D17) N18 (D18) N19 (D19) N20 (D20) N21 (D21) N22 (D22) N23 (D23) N24 (D24)	This configuration option appears if the “Assigned By” configuration option is Block or ACAMI.
Line 1 Displays:	**Line 2 Displays:**	**Meaning**	**Comments/Description**
N1 N2 N3 ..... N24: (If assigned to NET) D1 D2 D3 ..... D24: (If assigned to DTE)	**—**	**Unassigned**	This configuration option appears if the “Assigned By” configuration option is individual channels (Chan). Function key under the channel (N1, N2 etc.) assigns (unassigns) port (1, 2, 3, or 4) to that channel.
	Prt1 Prt2 Prt3 Prt4	Channel assigned to port 1, 2, 3, or 4	
	D1, D2 ... D24	Channel assigned to this DTE channel	
	N1, N2 ... N24	Channel assigned to this NET channel	

Table 6. General Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Gen Yellow: (Generate Yellow)	**Enab**	**Enab**	Yellow alarm is generated by the DSU/CSU on LOS, LOF, or AIS.
	Disab	Disab	
Clock Src:	**NET**	**NET**	Selects the clock source to be used as the master clock for the DSU/CSU.
	DTE	DTE	
	Prt1	Prt1	
	Int	Int	
	Ext	Ext	
Clock Rate:	2048	2048	Selects the clock rate of the source if external.
	1544	**1544**	
	8	8	
Tst Timeout:	**Enab**	**Enab**	Specifies whether the durations of user-initiated tests are limited by Tst Duration.
	Disab	Disab	
Tst Duration:	**10**	**10**	Specifies the duration of user-initiated loopback and pattern tests.
	Up	Up	
	Down	Down	
	Save	Save	

Table 7. User Configuration Options (1 of 3)

Option	Factory 1	Factory 2	Comments/Description
Self-Test:	**Enab**	**Enab**	Allows bypass of self-test on initialization.
	Disab	Disab	
Dial-In:	**Enab**	**Enab**	Controls whether dial-in access is allowed.
	Disab	Disab	
Password:	**None**	**None**	Controls whether a password is required for remote access.
	Com	Com	
Com Port:	Enab	Enab	Controls whether the COM port is enabled or disabled.
	Disab	**Disab**	
Com Use:	Mgmt	Mgmt	Controls how the COM port is used.
	ASCII	**ASCII**	
	Term	Term	
ComExtDev:	**Disab**	**Disab**	Controls the COM port's external device commands.
	AT	AT	
	Other	Other	
ComConnPrefix:	Edit	Edit	Controls the COM port's connect prefix.
	Clear	**Clear**	
ComConnected:	Edit	Edit	Controls the COM port's connect indication string.
	Clear	**Clear**	
ComEscapeSeq:	Edit	Edit	Controls the COM port's escape sequence.
	Clear	**Clear**	
ComEscDel:	**None**	**None**	Controls the COM port's escape sequence delay.
	0.2s	0.2s	
	0.4s	0.4s	
	0.6s	0.6s	
	0.8s	0.8s	
	1.0s	1.0s	
ComDisconnect:	Edit	Edit	Controls the COM port's disconnect string.
	Clear	**Clear**	

Table 7. User Configuration Options (2 of 3)

Option	Factory 1	Factory 2	Comments/Description
Com Rate: (Communication Port Rate)	1.2	1.2	Selects the bit rate for the COM port.
	2.4	2.4	
	4.8	4.8	
	9.6	**9.6**	
	14.4	14.4	
	19.2	19.2	
	38.4	38.4	
Char Length:	7	7	Selects the character length for the COM port.
	8	**8**	
CParity: (Communication Port Parity)	**None**	**None**	Selects the parity for the COM port.
	Even	Even	
	Odd	Odd	
CStop Bits: (Communication Port Stop Bits)	**1**	**1**	Selects the number of stop bits for the COM port.
	1.5	1.5	
	2	2	
Ignore DTR:	Yes	Yes	Specifies whether the COM port ignores DTR.
	No	**No**	
CmInActTm: (COM Port Inactivity Timeout)	Enab	Enab	Specifies whether the communication port disconnects after a certain period of inactivity.
	Disab	**Disab**	
CmDiscTm: (COM Port Disconnect Time)	**5**	**5**	Specifies the period of inactivity (1 to 60 minutes) that causes a disconnect if CmInActTm is enabled.
	Up	Up	
	Down	Down	
	Save	Save	
TnSession: (Telnet Session)	Enab	Enab	Specifies whether the DSU/CSU responds to Telnet session requests.
	Disab	**Disab**	
TnPaswd: (Telnet Password)	Enab	Enab	Specifies whether a password is required for Telnet sessions.
	Disab	**Disab**	
TnInActTm: (Telnet Inactivity Timeout)	Enab	Enab	Specifies whether a Telnet session disconnects after a certain period of inactivity.
	Disab	**Disab**	

Table 7. User Configuration Options (3 of 3)

Option	Factory 1	Factory 2	Comments/Description
TnDiscTm: (Telnet Disconnect Time)	**5**	**5**	The period of inactivity (1 to 60 minutes) that causes a disconnect if TnInActTm is enabled.
	Up	Up	
	Down	Down	
	Save	Save	

Table 8. Alarm Configuration Options (1 of 2)

Option	Factory 1	Factory 2	Comments/Description
Alrm Msg:	**Disab**	**Disab**	Does not display alarm messages.
	Com	Com	Sends alarm messages to COM port.
SNMP Trap:	Enab	Enab	Sends SNMP traps.
	Disab	**Disab**	
TrapDisc:	**Enab**	**Enab**	Specifies whether the modem connection will disconnect after a trap is sent.
	Disab	Disab	
DialOut:	Enab	Enab	Provides the option to allow automatic dial-out to send alarm messages on MODEM port.
	Disab	**Disab**	
Call Retry:	Enab	Enab	Specifies whether an outgoing call is retried on a busy or failed call attempt.
	Disab	**Disab**	
Dial Delay:	1–4 **5** 6–10	1–4 **5** 6–10	The time (in minutes) to delay between successive alarm dial-outs or retry attempts.
AltDialDir:	**None** 1–5	**None** 1–5	The alternate dial-out directory to use if a call to the primary number cannot be completed.
Err Rate: (Excessive Error Rate)	**10E–4**	**10E–4**	The error rate threshold for Excessive Error Rate Alarm.
	10E–5	10E–5	
	10E–6	10E–6	
	10E–7	10E–7	
	10E–8	10E–8	
	10E–9	10E–9	

Table 8. Alarm Configuration Options (2 of 2)

Option	Factory 1	Factory 2	Comments/Description
AlrmRelay: (Alarm Relay)	Enab	Enab	Specifies whether to activate the alarm relay on an alarm condition.
	Disab	**Disab**	

Table 9. General Management Configuration Options (1 of 2)

Option	Factory 1	Factory 2	Comments/Description
SNMP Mgt:	Enab	Enab	Specifies whether the DSU/CSU responds to SNMP session requests.
	Disab	**Disab**	
NMS Valid:	Enab	Enab	Specifies whether the DSU/CSU validates the IP address of an SNMP manager attempting access.
	Disab	**Disab**	
Num Sec Mgrs:	**1**	**1**	The number of SNMP managers allowed to access the DSU/CSU.
	2–10	2–10	
NMS *n* IP Adr:	Edit	Edit	Allows you to define or clear the allowable IP address of an SNMP manager.
	Clear	**Clear**	
NMS *n* Access:	**Read**	**Read**	The type of access allowed for an SNMP manager using community name 1.
	R/W	R/W	
System Name:	Edit	Edit	The SNMP system name for this device.
	Clear	**Clear**	
System Location:	Edit	Edit	The SNMP system location for this device.
	Clear	**Clear**	
System Contact:	Edit	Edit	The SNMP system contact name for this device.
	Clear	**Clear**	
CommunityName1:	Edit	Edit	A community name that is allowed access to this device. Defaults to *public* .
	Clear	**Clear**	
Access 1:	**Read**	**Read**	The type of access allowed for community name 1.
	R/W	R/W	
CommunityName2:	Edit	Edit	A community name that is allowed access to this device.
	Clear	**Clear**	
Access 2:	**Read**	**Read**	The type of access allowed for community name 2.
	R/W	R/W	

Table 9. General Management Configuration Options (2 of 2)

Option	Factory 1	Factory 2	Comments/Description
IP Adr:	Edit	Edit	The IP address needed to access the device.
	Clear	**Clear**	
NetMask:	Edit	Edit	The Subnet Mask needed to access the device.
	Clear	**Clear**	
Com IP Adr:	Edit	Edit	The IP address for the COM port when configured for SNMP.
	Clear	**Clear**	
Com NetMask:	Edit	Edit	The Subnet Mask needed to access the device when the COM port is configured for SNMP.
	Clear	**Clear**	
Com Link:	**PPP**	**PPP**	The link layer protocol for the COM port when configured for SNMP.
	SLIP	SLIP	
IPBusMast:	Enable	Enable	Specifies whether the device is the IP Bus Master.
	Disab	**Disab**	
Def Netwk:	**None**	**None**	Specifies the default network destination.
	IPBus	IPBus	
	Com	Com	
	FDL	FDL	
	EDL*n*	EDL*n*	

Table 10. Management Trap Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Num Trap Mgrs:	**1** 2–6	**1** 2–6	The number of trap managers supported by the device.
Trap*n* IP Adr:	Edit	Edit	Specifies the IP address for each trap manager. This configuration option is repeated for all *n* managers.
	Clear	**Clear**	
Trap*n* Dst:	**Def**	**Def**	Specifies the network destination for Trap Manager *n*.
	IPBus	IPBus	
	Com	Com	
	FDL	FDL	
	EDL*n*	EDL*n*	
Gen Trap:	Disab	Disab	Specifies the general trap types to enable: WarmStart, Authentication Failure or both.
	Warm	Warm	
	Auth	Auth	
	Both	**Both**	
Entp Trap:	**Enab**	**Enab**	Specifies whether the EnterpriseSpecific trap type is enabled.
	Disab	Disab	
Link Trap:	Disab	Disab	Specifies the link trap type to enable: Trap on Link Up, Link Down, or both.
	Up	Up	
	Down	Down	
	Both	**Both**	
Trap I/F:	NET	NET	When any link trap types are enabled, specifies which links to send traps for.
	DTE	DTE	
	T1s	T1s	
	Ports	Ports	
	All	**All**	