

1 DESCRIPTION

The TL1 driver allows the FieldServer to control devices and generate alarms as a TL1 Network Element. The control allows digital and analog inputs to be read and written by the FieldServer. The alarms can generate automatic commands, or the FieldServer can respond to input commands generated by a TL1 Monitoring client. The FieldServer emulates a Server with this driver.

Normally, the FieldServer will look like an Environmental Monitor to the TL1 client. Alarm Types will be chosen from the Environmental Alarm Types specified in the "NE Transport Surveillance Messages" Document (GR-833-CORE). The FieldServer supports multiple target identifiers (TIDs), and multiple access identifiers (AIDs). Both are specified from 1 to 255. This allows the FieldServer to report multiple (255) different alarms of each type such as AIRCOMPR or FIRE or POWER.

The driver may be used as a Serial driver and can be combined with the Telnet driver to be tunneled over Ethernet using a TCP connection.

1.1 Connection Facts

FieldServer Mode	Nodes	Comments
Client	-	Not Applicable
Server	256	

2 FORMAL DRIVER TYPE

Ethernet/Serial
Server Only

3 CONNECTION INFORMATION

Connection type: RS-232/Ethernet (tunnel over TCP using Telnet driver)
 Ethernet Speeds Supported: 10Base-T, 100Base-T¹
 Baud Rates: 110; 300; 600; 1200; 2400; 4800; 9600; **19200**; 28800; 38400; 57600; 115200 Baud
 Data Bits: 7
 Stop Bits: 1
 Parity: None
 Multidrop Capability: No

4 DEVICES TESTED

Device	Tested (FACTORY, SITE)
NETxPERT	SITE

5 COMMUNICATIONS FUNCTIONS-SUPPORTED FUNCTIONS AT A GLANCE

5.1 Operations Supported

FieldServer as a Client	FieldServer as a Server
Not Applicable	Message Allow Commands
	ALW-MSG-ALL
	ALW-MSG-COM
	ALW-MSG-ENV
	ALW-MSG-EQPT
	Message Inhibit Commands
	INH-MSG-ALL
	INH-MSG-COM
	INH-MSG-ENV
	INH-MSG-EQPT
	Alarm State Retrieval
	RTRV-ALM-ENV
	RTRV-ATTR-ENV

¹ Not all FieldServer models support 100BaseT. Consult the appropriate instruction manual for details of the Ethernet speed supported by specific hardware.

FieldServer as a Client	FieldServer as a Server
	Alarm Message Control
	SET-ATTR-ENV
	Session Control
	ACT-USER
	CANC-USER
	Discrete Control
	OPR-EXT-CONT
	RLS-EXT-CONT
	RTRV-EX-CONT
	Analog Control
	RTRV-EXT-ANLOG
	SET-EXT-ANLOG
	Change of State
	REPT-ALM-ENV
	REPT-EVT-ENV