EST-3

Description

The EST-3 External Communications Protocol (ECP) driver allows the FieldServer to transfer data to and from EST devices over RS-232 or RS-485 (with converter) serial ports using the EST-3 protocol. In the EST application the FieldServer always emulates a Client. Gateway Type II and Type III formats are supported.

The FieldServer makes use of the following ECP Services:

Read Operations

- Report Service
- Delta Service

Write Operations

- Command Service

All read points are continually updated using the Report Service; response times are enhanced using Delta Service broadcasts by the EST-3 panel.

Connection Facts

FieldServer Mode	Nodes	Comments
Client	1	Each FieldServer port can connect to only 1 EST-3 panel
Server	0	The EST3 ECP driver cannot be used as a Server

Formal Driver Type

Serial, Client only

Compatibility

FieldServer Model	Compatible		FieldServer Model	Compatible
ProtoCessor	Yes		QuickServer FS-QS-10xx	No
ProtoCarrier	Yes		QuickServer FS-QS-12xx	Yes
ProtoNode	Yes		QuickServer FS-QS-20xx	Yes
ProtoAir	Yes		QuickServer FS-QS-22xx	Yes

Connection Information

Connection Type: RS-232 or RS-485

Baud Rates: 9600; 19200 (as determined by EST-3 panel)

Data Bits: 8

Stop Bits: 1

Parity: None

Multidrop Capability: Yes

Devices Tested

Device	Tested (FACTORY, SITE)
EST-3 panel	Factory

Communication Functions

Data Types Supported

The following commands may be send using the EST-3 Command Service.

EST-3 Object Type	EST3 Commands	EST-3 Object Type	EST-3 Commands
Relay	Activate, Restore, Enable, Disable	Zone	Enable, Disable
Led	Activate, Restore, Enable, Disable	Card	Enable, Disable
ServGroup	Activate, Restore, Enable, Disable	AndGroup	Activate, Restore, Enable, Disable
GuardPtrl	Activate, Restore, Enable, Disable	Matrix	Enable, Disable
ChkInGrp	Activate, Restore, Enable, Disable	TimeCtrl	Enable, Disable
AltMessage	Activate, Restore	InstructionText	Enable, Disable
AmpPower	Activate, Restore, Enable, Disable	ClrPartitionEvent	Activate, Restore
AudMsg	Activate, Restore	DeviceTest	Activate, Restore
Reset	Activate, Restore	SysFunction1	Activate, Restore
PanelSil	Activate, Restore	SysFunction2	Activate, Restore
AlarmSil	Activate, Restore	SysFunction3	Activate, Restore
Drill	Activate, Restore	SysFunction4	Activate, Restore
GAInhibit	Activate, Restore	CalibrateAnalog	Activate, Restore
Set Time	Activate, Restore	2StageSounder	Activate, Restore, Enable, Disable
Set Date	Activate, Restore	SensorByPass	Activate, Restore
Reboot	Activate, Restore	GasAccelerated Response	Activate, Restore
Evacuate	Activate, Restore	RemoteReadLock	Activate, Restore
AltSensitiv	Activate, Restore	RemoteWrite Unlock	Activate, Restore
MCmsg	Activate, Restore, Enable, Disable	LogicalOutput	Activate, Restore, Enable, Disable
CmdList	Activate, Restore, Enable, Disable	LampTest2	Activate, Restore
Input	Enable, Disable	Partition	Away, Disarm

FieldServer as a Client

EST-3 Report Service (polled)
All panel points IO Status Status values are able to be decoded and stored as Alarm, Trouble, Supervisory, Monitor or as Others. It is now possible to configure the category that an event is placed in. The Driver can be configured to provide Relay confirmation status. The Driver can be configured to provide the acknowledge state of a point and can acknowledge it. **Sensitivity Report** The Driver can be configured to store dirtiness as value*10 for system sensor devices and the actual value for other devices (The Panel sends % values for other devices).
EST-3 Delta Service (unsolicited)
All panel points Delta message status values are optionally decoded and stored as Alarm, Trouble, Supervisory, Monitor or as Others.
EST-3 Date and Time Service
The FieldServer can be configured to synchronize its clock with Panel or the FieldServer can set the Panel's clock

Read Operations supported

The EST-3 driver makes use of the Report Service to read the current state of EST-3 points. It also updates the current state if Delta Service reports are received, which are unsolicited broadcasts initiated by the EST-3 panel when a point changes.

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Unsupported Functions and Data Types

EST-3 Command	Reason
Stay	Not required to date
Conditional Away	Not required to date
Conditional Stay	Not required to date
Update Status	Not required to date
Remove Bypass	Not required to date
Bypass	Not required to date

EST-3 Command	Reason
Panel State Service	Not required to date
Protocol Encapsulation Service	Not required to date
Access Event Service	Not required to date
Partition Reset Service	Not required to date
Command Logging Service	Not required to date

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