FieldServer Protocol Driver Sheet
EST3 ECP

FS-8700-39

Version: 1.13 / Rev. 0

1 DESCRIPTION

The EST3 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 EST3 ECP 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 EST3 panel.

1.1 Connection Facts

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

2 FORMAL DRIVER TYPE

Serial

Client Only

3 COMPATIBILITY MATRIX

FieldServer Model	Compatible with this driver
FS-x30	Yes
SlotServer	No
ProtoNode	No
QuickServer FS-QS-10xx	No
QuickServer FS-QS-12xx	Yes
ProtoCessor FPC-ED2	No
ProtoCessor FPC-ED4	Yes

4 CONNECTION INFORMATION

Connection type: RS-232 or RS-485
Baud Rates: 9600; 19200 (as determined by EST3 panel)
Data Bits: 8
Stop Bits: 1
Parity: None
Multidrop Capability: Yes

5 DEVICES TESTED

Device	Tested (FACTORY, SITE)
EST3 panel	Factory

6 COMMUNICATIONS FUNCTIONS - SUPPORTED FUNCTIONS AT A GLANCE:

6.1 Data Types Supported

The following commands may be send using the EST3 Command Service.

EST3 Object Type	EST3 Commands
Relay	Activate, Restore, Enable, Disable
Led	Activate, Restore, Enable, Disable
ServGroup	Activate, Restore, Enable, Disable
GuardPtrl	Activate, Restore, Enable, Disable
ChkInGrp	Activate, Restore, Enable, Disable
AltMessage	Activate, Restore
AmpPower	Activate, Restore, Enable, Disable
AudMsg	Activate, Restore
Reset	Activate, Restore
PanelSil	Activate, Restore
AlarmSil	Activate, Restore
Drill	Activate, Restore
GAInhibit	Activate, Restore
Set Time	Activate, Restore
Set Date	Activate, Restore
Reboot	Activate, Restore
Evacuate	Activate, Restore
AltSensitiv	Activate, Restore
MCmsg	Activate, Restore,Enable, Disable
CmdList	Activate, Restore,Enable, Disable
Input	Enable, Disable
Zone	Enable, Disable
Card	Enable, Disable

EST3 Object Type	EST3 Commands
AndGroup	Activate, Restore,Enable, Disable
Matrix	Enable, Disable
TimeCtrl	Enable, Disable
InstructionText	Enable, Disable
ClrPartitionEvent	Activate, Restore
DeviceTest	Activate, Restore
SysFunction1	Activate, Restore
SysFunction2	Activate, Restore
SysFunction3	Activate, Restore
SysFunction4	Activate, Restore
CalibrateAnalog	Activate, Restore
2StageSounder	Activate, Restore,Enable, Disable
SensorByPass	Activate, Restore
GasAccelerated Response	Activate, Restore
RemoteReadLock	Activate, Restore
RemoteWrite Unlock	Activate, Restore
LogicalOutput	Activate, Restore,Enable, Disable
LampTest2	Activate, Restore
Partition	Away, Disarm

FieldServer as a Client
EST3 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).
EST3 Delta Service (unsolicited)
All panel points
Delta message status values are optionally decoded and stored as Alarm, Trouble, Supervisory, Monitor or as Others.
EST3 Date and Time Service
The FieldServer can be configured to synchronize its clock with Panel or the FieldServer can set the Panel's clock

6.2   Read Operations supported

The EST3 ECP driver makes use of the **Report Service** to read the current state of EST3 points. It also updates the current state if **Delta Service** reports are received, which are unsolicited broadcasts initiated by the EST3 panel when a point changes.

7   UNSUPPORTED FUNCTIONS AND DATA TYPES

EST3 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

EST3 Service	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