

## WAYSIDE COMMUNICATIONS MANAGER, (WCM)



### A53447

- Ethernet® connection for field routers
- Frame Relay support for direct connection to a DSU
- Link Access Provided
- Legacy Code System Protocols supported
- 16-line Parallel I/O port
- LONTALK™ port for maintenance and diagnostics
- Remote support via Safetran
- Supported by ASERVER/WCC Maint Software

### Applications

The Safetran A53447 Wayside Communications Manager provides the ideal platform on which to integrate traditional wayside control point code units, defect detectors and wayside train inspection devices into corporate wide area networks.

To support network connections, the A53447 WCM 10Mbps Ethernet® port is ready to plug in to traditional routers or the Ethernet connections on fiber optic lightwave multiplex equipment so equipped. Alternatively, the A53447 WCM can be configured to provide a serial Frame Relay connection from a network DSU (customer provided). Link access protocols are supported (LMI, Annex-A, Annex-D).

The Safetran A53447 WCM provides support for attached field devices by high speed serial ports (up to 6), 16-line parallel I/O port, and Echelon® LONTALK™ 1.2Mbps LAN connections. Most legacy field code line protocols are already supported.

- Serial port interfaces for field code units, Train to Wayside Communications (TWC) devices, wayside train inspection equipment, detection systems, AEI systems, etc...
- Opto-isolated Inputs and Outputs for DC code line protocols and alarms
- 2 each 56Kbps Frame Relay connections supporting up to 6 PVC's for interface to customer provided WAN or router
- Adapts easily to any communications platform:  
FRAME RELAY, TCP/UDP/PPP/SLIP/IP, ANALOG, DIGITAL, ATCS Spec200, APCO25, CELLULAR, CDPD, DIAL BACK-UP, SATELLITE, ETC.
- Full temperature range and DC-isolated for nominal 12 VDC input supply

## SPECIFICATIONS

### On-Board CPU's

Communications Processors: 2 x Motorola 68302 @ 16 MHz  
Main Processor: 1 x Motorola 68332 @ 16 MHz

### Serial Communications

RS232 Lines: 6 x High Speed (synchronous or asynchronous)  
Connection: RJ-45

### Parallel I/O

Inputs: 8 fully isolated inputs  
Outputs: 8 fully isolated outputs

### LAN Communications

Network: Ethernet - TCP/IP, 10Mbps  
Local: Echelon® LONTALK™, 1.25Mbps

### Physical Connections

Power: WAGO, 3-pin  
Ethernet: RJ-45  
LONTALK: RJ-45  
Serial: RJ-45  
Parallel: 50-pin Telco

### Input Power

Supply Voltage: 10 to 30 VDC (DC Isolated)  
Power Consumption: 10 W

### Environmental

Temperature: -40° F to +160° F (-40° to + 70° C)  
Humidity: 95%, non-condensing

### Mechanical

Dimensions inches (mm): 1.75H X 17.25W X 8.00D (4.45H X 43.85W X 20.32D)  
Weight: 5 lbs (2.27 kg)

### Protocols Supported

ATCS Specification 200	GRS Datatrain
Safetran SCS-128	GRS J&K, E2
HDLC-LAPB/LAPD/UI	Harmon MCS1/MCS2/HDP-3
US&S Genisys/PRCCI	CN2000 (A&B)
US&S Flexicode	DHP2000
US&S 504/506/514	Others - Contact Engineering for Current Available Options
x.25	