

EDF PROCESSOR H00120



EDF DISPLAY TERMINALS

Up to 15 DF display units can be networked to a single EDF Processor. This allows for flexible installation and distributed monitoring terminals.

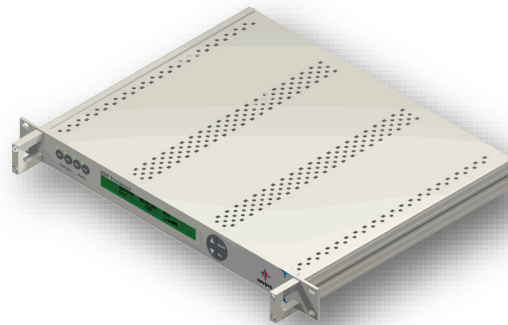
MULTI-CHANNEL

Monitor and Control multiple units via the DF Display Terminal Software.

Up to 32 Channels can be monitored in parallel – no scanning.

REMOTE MONITORING

Distance between the Display Terminals and the EDF Processor equipment can be suitably arranged to accommodate most installation infrastructures. Communication can be either Copper 2/4 wire or Fibre Cable. Other communication methods are available dependant on the installation.



The EDF Processor incorporates a high degree of functionality that has been designed and integrated into relatively simple system architecture. The equipment uses standard interfaces to communicate with each other and provide ease of integration with other systems.

The EDF processor is a 1U high standard 19" sub-rack unit with all connections being made at the rear panel. The EDF Processor is normally installed at the Antenna site of a DF installation with connectivity to the display units being via Ethernet connectivity.

The EDF processor uses Digital Signal Processing (DSP) algorithms in an embedded processor. These algorithms provide superior signal detection and bearing angle measurement. The signal detection capabilities of the processor even provide the EDF with the ability to accurately resolve bearings from receivers independent of their squelch control settings.

- Radio Direction Finding using Doppler shift.
- Provides a directional bearing in degrees from a received audio signal.
- Used in HAYSYS DF systems to aid spatial awareness and for navigational aids.
- Intuitive Front Panel menu system including four favourite keys.
- Display communications using TCP/IP (Ethernet).
- Continuous monitoring and alarm functions.

The DF antenna system is a fixed site medium aperture eight-element antenna array with each dipole element switched in turn by the EDF Processor to produce the Doppler shift used to resolve the bearing.

Dipole Elements are located at the end of eight arms rigidly connected to the centre hub. Each dipole is manufactured from aluminium, with all materials and finishes being corrosion resistant.



Specifications

Antenna Commutation Frequency	Selectable – 250 to 2000 Hz
RF Operating Frequency	88 MHz to 1000 MHz
Bearing Accuracy	$\pm 2^\circ$ (CAP 670 Class A) (Site Dependant)
Bearing Resolution	0.1°
DF Sensitivity	-123 dBm
DF Response time	<150ms
Sampling Rate	Selectable (400ms default setting)
Audio input	0.01 to 0.6 VRMS
Display	40 x 2 Character LCD
Display Indicators	Channel Name, Bearing, Alarm, Menu
Indicators	Alarm and Test Oscillator

Operating Temperature Range	0°C to +50°C
Size	Standard 1U 19" Rack
Weight	3Kgs

Interfaces	1 x Ethernet Interface 1 x RS232 Interface 1 x Audio input 1 x DF Antenna Drive 1 x Antenna Slave Input 1 x Aux Output pin (Relay contact to ground) 1 x Aux Output pin pair (Relay Closure) 1 x Aux Input pin (4K7 Pull-Up to 5V) 1 x Tx BAR Input pin (4K7 Pull-Up to 5V)
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Power Supply	85-264 VAC, 47-63 Hz
Power Requirements	13 Watts

Other Information

The EDF Processor is designed to operate as part of the larger DF system. The required equipments of the DF system include:

- DF Antenna
- Communication Receiver (H00122)
- Test Oscillator (H00123)
- Display Position
- Display Software (H00101)

All of the above items are available from HAYSYS Limited.

NETWORK CONNECTION

All equipment located in the Antenna site building is connected via standard network switch.

TEST OSCILLATOR

Control over the H00123 Test Oscillator via the network connection.

Please contact HAYSYS for more information

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