



EMTRAC

Personal Notification Unit

The EMTRAC PNU is designed for use in transit maintenance environments, where wayside workers are continually met with the potential for vehicle accidents. The PNU is equipped with precision Global Navigation Satellite System (GNSS) positioning, secure FHSS radio communication, and non-volatile memory for detailed activity logging. System configuration may be handled wirelessly or through the data-communication port.

The PNU may be carried on a belt, in a vest pocket, or in hand. Each PNU has its own ID, which may be assigned based on worker IDs. The PNU logs worker activity, alert details, and the ID and speed of approaching trains. The location of equipped workers may also be displayed in real time on the EMTRAC Central Monitor software.



Personal Notification Unit case style configurable for application

Features:

- Configurable alert levels and PNU responses, including ultra-bright LED flash, high-volume beep, and vibrate
- Simultaneous reception of multiple GNSS constellations
- Central Monitor software enables real-time monitoring of vehicle, worker, and equipment locations and activity
- Multiple definable alert and report scenarios. These scenarios include:
 - Work zones set along roadway/railway to alert workers of approaching vehicles
 - GNSS-defined zones set to prompt alerts when workers enter or leave a specific area
 - Alert/Panic button enables workers to notify agency personnel of critical events
 - Station interrogator kit enables automatic wireless download of activity reports, which include: PNU ID, Date, Time, Alert Type, Alarm State, PNU Latitude and Longitude, Train ID, Train Latitude and Longitude, and Vehicle Speed
- Comprehensive Warranty / Distributor Service and Support

Specifications

Dimensions: H - 4.88" (124mm) x W - 2.69" (68.5mm) x D - 1.14" (29mm)			
Connections: GNSS antenna, UHF antenna, Data Communication, and Recharge Port			
Battery Life: 12-hour typical			
Memory: Non-volatile, up to 10,000 events			
GNSS:	Nav. Update Rate: 2 Hz	GNSS Sensitivity: -160 dBm, -147 dBm cold start	
UHF Radio:	Transmit Power: 1 mW - 1 Watt	Urban Range: Up to 3,600 ft	
	Spectrum: FHSS 900 MHz	Data Throughput Range: 9,600bps - 115,200bps	
	Encryption: 256-bit AES	ETA Accuracy: <3 sec. std. deviation (for 30-sec ETA)	
	Receiver Sensitivity: -110 dBm	ETA Notification Range: 15 to 45 seconds	
	Frequency: 902 - 928 MHz		

*All specifications subject to change