

BASEPAC

DIGITAL WIRELESS BASE STATION

440-480 MHz

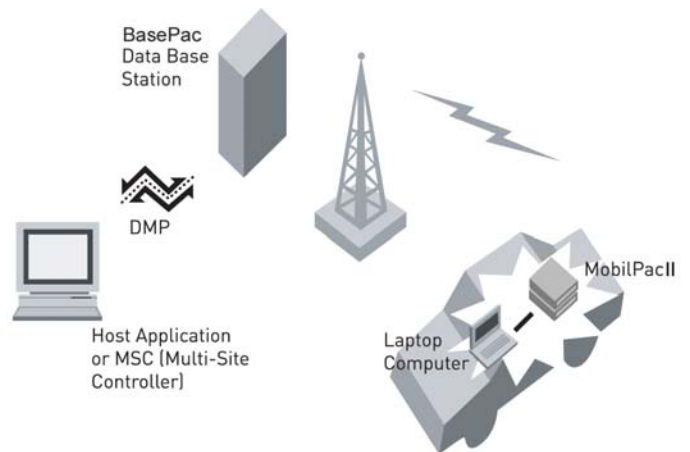


Dataradio's BasePac digital wireless base station is the perfect complement to the Dataradio MobilePacII. The BasePac / MobilePacII system offers contemporary technology in a cost-effective solution for those new to mobile data networks, smaller system users or those replacing legacy equipment. The Dataradio BasePac combined with Dataradio's MobilePacII mobile radio modem sets a price-performance benchmark for mobile data infrastructure and delivers high-speed data performance targeted for vehicular applications. Each BasePac is factory-configured for your unique system requirement eliminating setup hassles. BasePac's slim design allows easy integration into rack mount enclosures. The BasePac has a powerful CPU that offers enhanced maintenance features to improve the already superior decode sensitivity found in Dataradio products. The improved decode sensitivity translates into more efficiently transmitted data and improved channel capacity. The Dataradio BasePac / MobilePacII solution enhances your mobile data network to provide fast access to vital information for public safety and critical infrastructure applications.

FEATURES

- 25 KHz channels
19.2 Kbps
- 12.5 KHz channels
14.4 Kbps
- Supports IP network connectivity
- High efficiency DBA transmission protocol
- Flash-memory allows downloadable configuration data, CPU firmware and DSP modem
- High-tech controller with expanded CPU and DSP memory provides improved test and maintenance features
- Factory configured and programmed
- 2 year limited factory warranty

SYSTEM DIAGRAM



BASE PAC SPECIFICATIONS

General

	UHF
Frequency	440-480 MHz
RF/Modem Assembly Size	19.0" W x 10" H x 14.5" D
Frequency Stability	1.0 ppm (-20° C to +60° C)
Supply Voltage	120 VAC
Base Station Power Consumption @ 120 VAC	2.6A max.
Channel Spacing	25 kHz, 12.5 kHz
Operating Temperature Range	-10° C to +40° C (continuous 25W)

Operation	Full-duplex	
Protocol	Dataradio Proprietary DBA	
Data Rates	14400 b/s, 19200 b/s	
Modulation Type	SRRC4FSK	
Rx Sensitivity for 1% Packet Error Rate at Carrier Frequency	UHF (Half-Channel) -110 dBm @ 14.4 kb/s	UHF (Full-Channel) -110 dBm @ 19.2 kb/s
FCC/IC Certifications UHF: 440-480 MHz	FCC CASTEL0060	IC (DOC) 737A-T85426
Emission Designators Bit Rate: 19200 Baud Rate: 9600 Bit Rate: 14400 Baud Rate: 7200	14K4F1D (C) 8K00F1D (D)	

Receiver

Selectivity @ 25 kHz @ 12.5 kHz	87 dB min, 90 dB typical 83 dB min, 85 dB typical
Sensitivity @ 12 dB SINAD (psophometrically weighted (de-emphasis response))	-116 dBm
Spurious Response Rejection	100 dB
Intermodulation Rejection - EIA (25 kHz) - EIA 300-096 (12.5 kHz)	85 dB 80 dB
Hum and Noise - EIA (25 kHz) - ETS 300-096 (12.5 kHz) (psophometrically weighted (de-emphasis response))	55 dB 50 dB

Transmitter

Rated continuous RF Power	25 W (-10° C to +40° C)
Spurious Emissions: -transmit -standby	-36 dBm to 1 GHz, -30 dBm to 4 GHz -57 dBm to 1 GHz, -47 dBm to 4 GHz
VSWR Stability	3:1 mismatch
Transmitter Sideband Noise @ ± 25 kHz @ ± 12.5 kHz	-95 dBc -105 dBc