

An RF Repeater extends the wireless coverage of the nearest base station to designated shadow areas. These shadow areas occur due to various factors (e.g. mountains, large buildings, structures that obstruct base station signals, range of the base station).

Our revolutionary Epoch-S02™ repeaters are ideal for wireless providers who are looking into extending coverage within a building and extending coverage outdoors. Some of the key features of our versatile Epoch-S02™ repeaters are as follows:

- 100 mW to 1 W Composite Output Power
- High Gain (50 to 90 dB or 55 to 95 dB)
- AGC & MGC (40 dB Range @ 0.5 dB Step)
- Uplink Tracking Mode
- User Friendly GUI Software
- Fixed Band(s) or Band Selectable via GUI Software
- Remote Management via 3G Wireless Modem (Optional)
- NEMA 4 Compliant Enclosure (Outdoor Environment)
- Back-Up Battery (Optional)

## Repeater Specifications

### ELECTRICAL SPECIFICATIONS

PARAMETERS		SPECIFICATIONS	COMMENTS
Frequency Range	FL	1930 to 1990 MHz	
	RL	1850 to 1910 MHz	
Sub Band Filtering		5 MHz, 15 MHz, or 20 MHz	A, D, B, E, F, C, AD, AE, AF, DB, DC, BE, BF, EC or FC
Operating Frequency		Programmable	
Frequency Error		$\leq +/\!- 0.1$ ppm	
System Delay		$\leq 5$ usec	Each Direction
Receiver Dynamic Range		-85 to -45 dBm	
Maximum Adjacent Band Signal Level		-45 dBm	@ Isotropic Antenna
Repeater Gain		50 to 90 dB	
Maximum FL and RL Output Power		+24 dBm	Composite
FL AGC Range		40 dB	
RL AGC Range		40 dB	
AGC Step Size		0.5 dB	
Gain Linearity		$\leq +/\!- 1.0$ dB	
Gain Flatness		$\leq 2.5$ dB	
Total PA Power Variance		$\leq +/\!- 0.5$ dB	
In Band Noise		$\leq -45$ dBc	@ Fc $+/\!- 885$ KHz
		$\leq -50$ dBc	@ Fc $+/\!- 1.98$ MHz
Spurious Emission		$< -13$ dBm	@ Fc $+/\!- 2.25$ MHz
Rho Factor		$\geq 0.912$	
Noise Figure		Typical 4 dB	@ Maximum Gain
VSWR		$\leq 1.5:1$	

## MECHANICAL SPECIFICATIONS

PARAMETERS		SPECIFICATIONS	COMMENTS
Cabinet Size		15.75 x 17.72 x 7.85 inches	W x H x D
Cabinet Weight		≤ 50 lbs	
Cabinet Mount Type		Utility Pole Mount	
Connector Type	Antenna	N-Type (F)	
	Coupling	SMA (F)	30 dB
	Frame Ground	Hex Nut (M6)	
	Control	DB9 (M)	
Cooling		Convection	
Weatherproofing		NEMA 4, IP65	

## POWER SPECIFICATIONS

PARAMETERS		SPECIFICATIONS	COMMENTS
Main AC Power		100 to 240 VAC	
AC Frequency		45 to 65 Hz	
Power Consumption		≤ 300 Watts	
AC Supply Protection		Fuse	
Auxiliary Power (Option)	Output Voltage	12.0 VDC	
	Endurance	≥ 2 hour	
	Main to Auxiliary	Automatic	
	Auxiliary to Main	Automatic	
	Battery Protection	Internal Fuse	
Grounding		External Threaded Stud	

## ENVIRONMENTAL SPECIFICATIONS

PARAMETERS	SPECIFICATIONS	COMMENTS
Operating Temperature	-22 °F to +122 °F	
Storage Temperature	-22 °F to +176 °F	
Humidity	10 to 85%, RH	