

## OAR18-002 OUTDOOR BROADBAND REPEATER

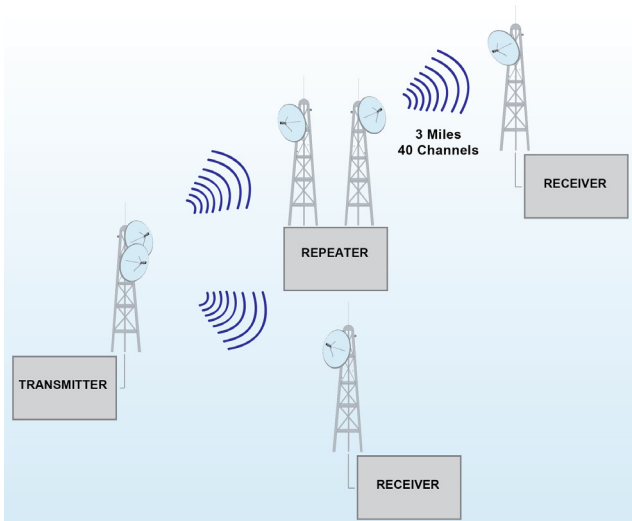
- **Broadband repeater with 72 Channel Capability**
- **6 Mile (10 Kilometer) Range**
- **Upgradeable, Modular Design**
- **Digital Ready**



### PRODUCT APPLICATION:

The OAR18-002 Repeater is an on-frequency repeater designed to bypass line-of-sight obstacles between transmitter and receiver locations by amplifying an incoming signal from the main transmitter and re-transmitting it in one or more directions.

With a capacity of up to 72 channels, the OAR18-002 can feed several receivers and one local booster amplifier simultaneously.



The repeater's capability to drive a booster amplifier with a high quality signal makes it possible to significantly increase the effective of the repeater and/or the number of receivers fed from the repeater site.

The OAR18-002 features operating diagnostics such as output signal level monitoring and power supply voltages as well as local VHF drop to facilitate connection to an on-site receiver.

The repeater incorporates an Automatic Gain Control (AGC) circuit and state-of-the-art Solid State GaAs amplifiers (LNA at the input and Power Amplifier at the output) for best reliability and performance.

Designed for many years of trouble-free operation in an outdoor environment, the OAR18-002 can be easily upgraded to the higher power OAR18-005 repeater to accommodate additional requirements for more receiver sites or higher channel load.

<b>Repeater</b>							
Input/Output Frequency <sup>2</sup> :	17.7 to 18.3 GHz						
Noise Figure (35 channels) <sup>3</sup> :	5.0 dB						
Output Level for 60 dB C/CTB:	Channels	Main Output			dBm/Channel		
		dBm/CH	C/N(db)	C/CTB(db)	dBm/CH	C/N(db)	C/CTB(db)
	12	1.5	62.0	60.0	-26.0	65.0	72.0
	21	-1.0	59.5	60.0	-28.5	62.5	72.0
	35	-3.5	57.0	60.0	-31.0	60.0	72.0
60	-6.5	54.0	60.0	-34.0	57.0	72.0	
Normal Gain:	40.0 dB						
Gain Flatness:	±1 db						
Internal Attenuator Range:	20 dB						
Input Connector:	WR-42 Waveguide						
Output Connector:	WR-42 Waveguide						
Booster Output Connector:	WR-42 Waveguide						
Temperature Range:	-40° to 130°F (-40° to 55°C)						
Humidity:	100% Max						
Primary Power:	60/120/240 VAC @ 50/60 Hz or 12/24 VDC (per Customer Spec)						
Power Consumption:	100 VA RMS						
Mounting:	Antenna Pole Mount						
Weight:	50 lbs. (22.7 kg)						
Dimensions:	16" W x 12" H x 7" D (48.26cm rack width x 17.78cm H x 50.88cm D)						

<sup>1</sup> Specifications subject to change without prior notice.

<sup>2</sup> Other frequencies available.

<sup>3</sup> Gain may be varied with 10dB attenuator.