

OAR18-001 OUTDOOR BROADBAND REPEATER

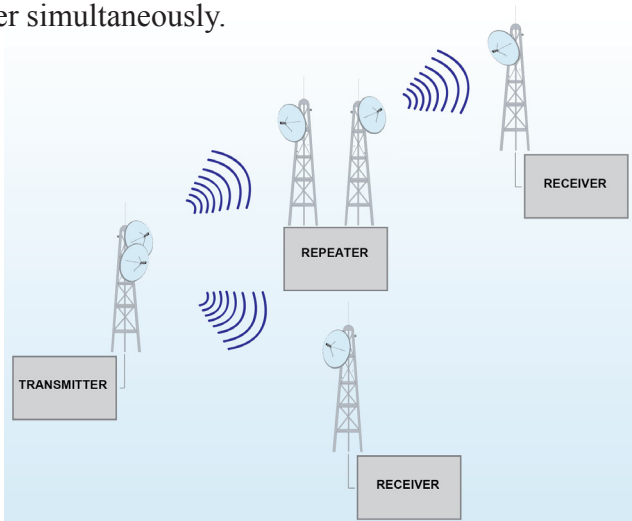
- **Broadband Repeater with 72 Channel Capability**
- **Up to 1 Mile with 40-Channel Loading**
- **Upgradeable, Modular Design**
- **Digital Ready**



PRODUCT APPLICATION:

The OAR18-001 is an on-frequency repeater designed to bypass line-of-sight obstacles between desired 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 OAR18-001 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 range of the repeater and/or the number of receivers fed from the repeater site.

The OAR18-001 features operating diagnostics such as output signal level monitoring and power supply voltages as well as a local drop to facilitate connection to an on-site receiver.

The repeater incorporates an Automatic Gain Control (AGC) circuit for gain control and adjustment 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 OAR18-001 can be easily upgraded to the higher power units of the OAR18 family of repeaters.

Repeater							
Input/Output Frequency ² :	17.70 to 18.30 GHz						
Noise Figure (35 channels) ³ :	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	-2.5	59.0	60.0	-30.0	60.0	80.0
	21	-5.0	58.0	60.0	-32.0	60.0	80.0
	35	-7.5	57.0	60.0	-35.0	60.0	80.0
72	-10.5	54.0	60.0	-37.5	60.0	80.0	
Normal Gain:	40.0 dB						
Gain Flatness:	±1 db						
Internal Attenuator Range:	30 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)						

¹ Specifications subject to change without prior notice.

² Other frequencies available.

³ Gain may be varied with 10dB attenuator.