CABLE AML

OAR02-008
OUTDOOR ACTIVE REPEATER (8Watts)

- **Broadband Repeater with 31 Analog or 150 Digital TV Program capability**
- **Provides high-quality MMDS signal to shadowed areas**
- **Rugged, Outdoor Enclosure**
- **Input LNA Included**

PRODUCT APPLICATION:

The OAR02-008 is a broadband solid-state MMDS repeater designed to receive, amplify and retransmit, at the same frequency, up to 31 analog or 150 digital TV programs (with 64 QAM, 256 QAM or OFDM modulation).

The OAR02-008 is designed to provide cost effective MMDS coverage to an area that is in the shadow of the main transmitter. With an appropriate transmit antenna it can re-transmit the input signal to a distance of up to 5 km.

The OAR02-008 is designed to be installed outdoors to minimize the cable lengths connecting it to the input and output antenna.

It consists of two outdoor enclosures. The first is a weatherproof outdoor low noise amplifier (LNA) designed to be mounted near the input or receive antenna.

This LNA is connected to the repeater input by means of a low-loss 50-ohm coaxial cable. The second enclosure houses the repeater components, which consist of a microwave AGC circuit, driver amplifier, power amplifier and power supply, all packaged in a weatherproof enclosure suitable for mounting within 50 meters of the transmit antenna.

The LNA is powered through the coaxial interconnect cable between it and the Repeater.

The Repeater standard power configuration is 120 to 240 VAC. Other AC and DC powering options are available by request.

Product Specification[1]

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Repeater

Input Frequency[2]:	2.5 to 2.7 GHz
Maximum Total Input Power:	-30 dBm at LNA input
Output Frequency[2]:	2.5 to 2.7 GHz
Output Level for 50 dB C/CTB: (measured with CW carriers)[3]	

Channels	Average Power dBm/Channel	Peak Power dBm/Channel
9	16.5	19.0
12	15.0	17.5
18	13.0	15.5
24	11.0	13.5
30	10.0	12.5

Frequency Response:	±1 dB
Gain:	18 dB maximum for LNA and 75 dB maximum for OAR02-008
AGC Range:	20 dB typical
Noise Figure:	3 dB typical from LNA input
Input Return Loss:	15 dB
Input Connector	Type “N” Female
Output Return Loss:	18 dB
Output Connector:	Type “N” Female
Temperature Range:	-40° to 122°F (-40° to 50°C)
Humidity:	100% max.
Power Consumption:	60 VA
Primary Power:	120-240 VAC, 47-63 Hz (per customer specification)
Mounting:	Optional pole-mounting kit available
Weight:	11 lb. (5 kg)
Dimensions:	10.0” L x 6.5” W x 6.0” D (251mm x 160 mm W x 150mm D)

[1] Specifications subject to change without prior notice.
[2] Other frequencies available.
[3] The C/CTB with modulated carriers are approximately 6 dB better than with CW carriers.