

## PRELIMINARY - UG16-002 Smart Leaky Bidirectional Amplifier



This VHF/UHF bidirectional amplifier provides excellent sensitivity and range by our patent pending noise reduction techniques. Unparalleled sensitivity by on demand regeneration of signals at each amplifier preserve signal quality , while pilotless , automatic gain control and intermodulation removal makes for basic and unskilled installation.

Gone is spectrum tilt when multiple amplifiers are cascaded, and indeed this amplifier can be inserted in a string of existing amplifiers to 'fix' tilt and high noise floors in a system. The signal processing is channelized and is agnostic- analog , digital.

Control and monitoring of the units is accomplished by communication on the cable between units, or by short range secure Wi-Fi. An unpowered relay-bypass option is available.

### Capabilities

- Bidirectional amplifier
- Pilotless, automatic gain control
- No spectrum tilt and tilt correction of analog amplifier systems
- Capable of theoretical minimum noise floor operation.
- Control by RF on leaky feeder or WiFi
- Low Intermodulation and 100dB control range
- Cable power 18 to 35V
- **A CortexRF product**

### Specifications UG16-002

Maximum output power : 1W PEP

Typical deployed noise floor : -110 dBm (10kHz BW)

Power consumption : max 11 Watts

Cable Interface : Gland and saddles .

Remote access: RF modem on feeder and 2.4 GHz 802.11b

Typical RF bandwidth : ~ 5%

Minimum T/R frequency split : ~ 7%

Enclosure : Hammond watertight aluminium diecast.