# VLAD

**BIDIRECTIONAL VHF AMPLIFIER**

UQOMM
Quality Underground Communications

## DESCRIPTION

- The VLAD bidirectional linear VHF Amplifier with Local Diagnostic, its designed to work with reliability in harsh conditions like underground mines. IP66 protection and IK10 against external mechanical shocks. The VLAD is powered by the same Leaky Feeder cable, no special tools are required for instalation.
- The VLAD includes an AGC circuit to normalize the output level. The AGC circuit works automatically in SMARTune mode adjusting the signal power level to avoid unbalance and noise in the uplink path.
- The VLAD has high intensity LEDs for Local Diagnostics, which indicate: RF Downlink Signal level, Line Voltage, and Up/Down link AGC and alarms.
- The VLAD includes a manual adjustable attenuation to reduce the Gain of the amplifier, this feature called Cable Length Compensation, allows to adapts the amplifier gain when it is necessary to install an amplifier at shorter / longer distances.
- The amplifier has custom SAW Filters designed for great external noise immunity and side-bands reject.
- Like other SIGMA devices, the VLAD use bronze terminals. No special tool or training required, perfect for assembly in time and operational critical workplaces like underground mines.

## SHORT DESC.

- Bidirectional VHF Leaky Feeder Amplifier, IP66. SMARTtune option included
- Plugging Options: SMARTRing; FM, Remote Diagnostic.

## SPECS

| | |
|---|---|
| **Downlink Freqs:** | 148-160 MHz |
| **Uplink Specs:** | 170-186 MHz |
| **Impedance:** | 75 Ohms |
| **Total Gain:** | Max: 25dB, Typ 16dB |
| **Gain adjust:** | Manual: 16 dB, Auto: 18 dB |
| **Pout Max:** | 5 dBm (3,16 mW) |
| **Max. Current:** | 3 Amp Max. |
| **Voltage range:** | 6 a 52 VDC |
| **Current drain:** | 45mA@48V, 90mA@24V, 180mA@12V |
| **Cable connector:** | Bronze terminals |
| **Enviromental protection:** | IP67, metallic cable glands. |
| **Weight:** | 1,5 Kg |
| **Size:** | 220 (w) x 120 (d) x 90 (h) mm3 |


The Exporter
15 Nobel Street, The Interchange,
Somerset West, South Africa

www.radioexport.com
radio@theexporter.co.za
021 851 1700