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**MINECOM**

A division of TR Corporation

## SMART REVERSE LAV AMPLIFIER SERIES

- DRIVE-BY DIAGNOSTICS
- AGC (AUTOMATIC GAIN CONTROL)
- SMART REVERSE CAPABILITIES
- HIGH NOISE IMMUNITY
- VOICE, DATA & VIDEO CAPABLE
- SURFACE MOUNT COMPONENTS

### DESCRIPTION

SMART Reverse LAV Line Amplifier series is capable of amplifying Voice - Data - Video signals and is packaged in an IP66/NEMA4X heavy duty enclosure. The amplifier is powered from the leaky feeder cable; no special tools are required to splice it into the leaky feeder cable. The LAV incorporates 3 separate amplifiers (full Duplex), one providing the Voice/data Down-Link or forward path, the second provides the Voice/data Up-Link or reverse path back to the Head End, the third provides the Video Up-Link back to the Head End. AGC (Automatic Gain Control) circuits are used to overcome signal level changes brought about by the number of channels in use at any one time, as well as over coming variances in the distance between amplifiers.

The SMARTReverse system provides for redundant communications within the main leaky feeder distribution system in the event of a system failure or cable break. Should any part of the system lose communications to the master head end, the intelligent SMARTReverse amplifiers will automatically reverse their direction to provide a seamless and immediate redundant path to maintain communications throughout the mine in the event of a system failure.

The LAV line amplifier also offers Drive-By Diagnostics®, in the form of 4 high intensity LED's, which indicate the current condition of the amplifier. Simply by walking or driving past the amplifier you can determine, without opening the cover, that voltage is present, all amplifiers are operational and whether the forward or reverse AGC circuits are operational. As an option, a PC based diagnostics module can be added, allowing the condition of the amplifier to be displayed on a PC. The amplifier was specifically designed for the transmission of high speed Data, it utilises four filters whereas some manufacturers only offer 2 filters. The LAV amplifier offers a high level of sideband immunity, as well as a high level of immunity from external noise.



### SPECIFICATIONS

<b>Frequency Voice/Data:</b>	<b>VHF &amp; UHF</b>
<b>Frequency Video:</b>	<b>20 to 120Mhz (NTSC or PAL standards)</b>
<b>Gain:</b>	<b>350m version – 16dB    500m version – 22dB</b>
<b>Connection:</b>	<b>Brass Screw terminal and Saddle</b>
<b>Impedance:</b>	<b>50 or 75 ohm versions</b>
<b>Through Current Capacity:</b>	<b>1.5 amps Max</b>
<b>Voltage &amp; Current Drain:</b>	<b>12, 24, 48 volt versions - 210mA @12VDC</b>
<b>Enclosure:</b>	<b>IP66/NEMA4X heavy duty enclosure c/w IP66 brass cable glands</b>
<b>Weight &amp; Dimensions:</b>	<b>1.2Kgs – 190(w) x 60(d) x 75(h) mm</b>