ULTRACOMM® DIGITAL LEAKY FEEDER SYSTEM TR-159-PLUS AMPLIFIER

The **TR-159-PLUS** amplifier represents the next generation in Tunnel Radio's line of IP compatible Mine Wireless technologies. This digital capable workhorse sets a new standard in wireless communication systems.

Part Number: TR-159-PLUS Amplifier

The amplifier's high linearity improves multi-channel performance and is compatible with digital modulation mobile radio schemes. Future-proof your investment utilizing TR's diagnostics and our proven Integrated RFID Tracking in-unit options. The TR-159-PLUS system is a full generation ahead of other systems on the market.

Amplifier with Motorola MOTOTRBO Digital Wireless Radio

Base Interface Unit and Repeater

TR-159-PLUS with Integrated RFID Tracking

ULTRACOMM® VHF COMMUNICATION SYSTEM

- **Amplifier with Automatic Gain Control (AGC)** – keeps amplifier level where they should be; automatically corrects for system gain imbalances

- **Software-Defined Amplifier (SDA):** program, IP tunable, monitor, and diagnose your communication *system via the internet*

- **Remote I/P Diagnostics and Monitoring**

- **Integrated *MineAx*™ tracking option, Mine Tested and Patent Pending**

- **10dB higher power output than all other competitors**

ULTRACOMM® VHF AMPLIFIER, TR-159-PLUS

SPECIFICATIONS

Electrical Specifications (typical), TR-159-PLUS	
Passband, Tx	150-155.5 MHz
Passband, Rx	170-175.5 MHz
Gain, Rx, Tx	28 dB
Output power at 1 dB compression (P_{1dB}), Tx	+15 dBm
Impedance	75 Ω, 50 Ω
DC power	+15 to +36 VDC, 150 mA (180 mA with TMS option)
Distributed Antenna System Specifications	
Multi-channel operation	8 channels @ composite P_{out} = +5 dBm
Amplifier spacing, TR-1501-CBL cable	350-450m
Options, TR-MX-159-PLUS	
Remote diagnostics	Tunnel Monitoring System (TMS)
RFID tracking	MineAx ® RFID tracking expansion
Remote control	Software Defined Amplifier (SDA)

Tunnel Radio creates leading-edge technologies that serve the needs of mining, Oil&Gas operations, railroads and industrial systems worldwide. From our Ultracomm® communications systems and MineAx® RFID tracking to our precise gas sensing and diagnostic and monitoring software, we have the technology to help you stay on top.

MAIN OFFICE ADDRESS

6435 Hyslop Road, Corvallis, Oregon 97330
Phone: 541.758.5637

MOTOROLA SOLUTIONS

Radio Solutions Channel Partner