

**ULTRACOMM® DIGITAL LEAKY FEEDER SYSTEM  
TR-550 AMPLIFIER**

The TR-550 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-550 Amplifier

The amplifier's high linearity improves multichannel performance and is compatible with complex digital modulation schemes. Future-proof your investment utilizing TR's diagnostics and our proven integrated RFID tracking in-unit options. The TR-550 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-550 with  
Integrated RFID  
Tracking

- Amplifier with Automatic Gain Control (AGC) – keeps amplifier level where they should be; automatically corrects for system gain imbalances
- Remote I/P Diagnostics and Monitoring
- Integrated MineAx™ tracking option, Mine Tested and Patent Pending
- Utilizing the same technology, TR can turn *most other manufacturer's* amplifier into a digital reader

**ULTRACOMM® UHF COMMUNICATION SYSTEM**

AGC offered on our Standard UHF 550 Amplifier



# ULTRACOMM® UHF AMPLIFIER, TR-550

U.S. Patent Number 6041216 A

## SPECIFICATIONS

### Electrical Specifications (typical), TR-550

Passband, Tx	448-455 MHz
Passband, Rx	465-472MHz
Gain, Rx, Tx	28 dB
Input, output return loss	10 dB
Output power at 1 dB compression ( $P_{1dB}$ ), Rx	+0 dBm
Output power at 1 dB compression ( $P_{1dB}$ ), Tx	+15 dBm
Output third-order intercept point (OIP3), Rx	+10 dBm
Output third-order intercept point (OIP3), Tx	+32 dBm
Impedance	50 $\Omega$
DC power	+11 to +28 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-1505-CBL cable	1350 ft

### Options, TR-MX-550-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 mines, 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

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**MOTOROLA SOLUTIONS**

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