DMR6000 Eight-Input Diversity Receiver and Remote Site Controller

IP-Based Remote Control for Diversity Receive Sites and Distributed Receive Systems

Troll’s DMR series of products combines a multi-channel microwave receiver with a remote site diversity antenna controller. The combination provides a two (2) to eight (8) channel diversity receiver for remote Electronic News Gathering (ENG) or law enforcement antenna sites. The DMR processor performs video decryption, encryption, video and audio decoding for local monitoring and secure IP transport to remote control centers.

The DMR’s front panel touchscreen enables live video and audio preview, control and monitoring of antennas, transmission, test and signal diagnostics. In addition, video can be viewed locally via HDMI, Ethernet or composite.

DMR6000 receivers can be daisy chained together to receive multiple RF signal sources on different channels simultaneously. This passive “loop through” feature makes it possible to support multiple aircraft and ground vehicles with a single diversity antenna. DMR receivers incorporate Maximum-Ratio Combining and packet switching to “knit together” signals from different antenna panels to provide cohesive 360° coverage. The DMR6000 interfaces directly to all Troll Systems antennas, including the A1 and A6 family of pannel antennas, as well as our long-range tracking antennas like the A600 or MT300.

The DMR system provides remote control of the entire receive site. The modern design incorporates the latest networking technology, with extensive packet-level advances in diagnostic and test capability. A Linux operating system delivers remarkable performance while providing an Ethernet compatible platform for delivering encrypted HD video and data over IP.
### DMR6000 Receiver Controller Series Specifications

<table>
<thead>
<tr>
<th>Interfaces</th>
<th>USB, HDMI, composite, Ethernet and serial</th>
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<tbody>
<tr>
<td>Output</td>
<td>UDP streaming over IP, HDMI and composite video</td>
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<tr>
<td>HDMI Video Output</td>
<td>1920 x 1080 resolution</td>
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<tr>
<td>Front Panel Display</td>
<td>5” LCD touchscreen with 800x480 resolution with audio preview</td>
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<tr>
<td>Control Modes</td>
<td>Touchscreen local control or remote control via serial, Ethernet or dial-up</td>
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<tr>
<td>DVR</td>
<td>500GB drive with approximately fourteen days of recording</td>
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<tr>
<td>Eight (8) UHF Inputs:</td>
<td>Precision BNC connectors</td>
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<td></td>
<td>Broadband LNA with low NF (&lt; 2dB)</td>
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<td></td>
<td>Bias tees for BDC power (1 Amp per channel, individually switched) bias tee voltage and current monitors,</td>
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<td>Short circuit protected with LED status indicators</td>
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**Eight (2-8) UHF Loop Outputs:** Loop gain up to 16dB
- No downstream threshold degradation

**Multiplexer Stage:**
- High speed 6:1 GaAs MESFET switch
- Software-controlled input attenuation (0–32dB per channel)

**Input Frequency Range:** 48–940MHz
**Input Dynamic Range:** Threshold to +15dBm

**I/O and Control:**
- Ethernet, serial, USB ports
  (compatible with existing 19.2 kbaud modem links)

**Display Modes:**
- External monitor option: HDMI and composite
- Single channel - 1 of 8
- Multiple channel - 2 to 8 simultaneous

**Viewer Control:**
- Span 500KHz to 2 MHz frequency 50MHz to 950MHz

### Physical Characteristics

- **Weight:** 10 lbs. (4.6kg)
- **Vertical Rack Space:** 2U
- **Dimensions (LWH):** 15 x 19 x 3.5 inches (38 x 48 x 8.9 cm)
- **Input Power:** 110-240VAC at 50/60Hz
  - 300W Max
- **Temperature Range:** -25 to 60°C (-13°F to 140°F)

Specifications subject to change without notice.