



# RNG-AMD POWER SUPPLY DIAGNOSTIC LINE AMPLIFIER

- Power Supply Remote Diagnostics/Testing
- Widest Bandwidth Amplifier Available
- Highest RF Gain Amplifier Available
- Local and Remote RF Diagnostics
- Supply Voltage Range, 5.5 - 12.5 Vdc
- Facilitates Ethernet Connectivity

## FEATURES

The Becker Mining Systems smartcom® 150 Power Supply Diagnostic Line Amplifiers compensate for Leaky Feeder cable and splitting losses while providing 16 simultaneous noise-free voice radio channels (no third order intermodulation products), Power Supply Diagnostics and Ethernet connectivity using standard cable modems.

All smartcom® 150 line amplifiers provide up to 500 m spacing.

Local/Remote RF Diagnostics, Power Supply Diagnostics, Ethernet, video and accurate Automatic Gain Control (AGC) without Return Pilot noise buildup are built-in to every amplifier.

Power Supply Diagnostic line amplifiers connect to ComTrol PS-1571M and PS-1572M power supplies to periodically test and report battery capacity.

2 Year component & workmanship warranty.

| MECHANICAL DATA        |   |
|------------------------|---|
| Dimensions (L x H x W) | 323 x 121 x 270 mm (12.7 x 4.8 x 10.6 in)       |
| Weight (nominal)       | 3.20 kg (7.05 lbs)                              |
| LF Connectors          | Two 3 Terminal Lug Connectors, PG21 cable grips |

| ENVIRONMENTAL DATA |                               |
|--------------------|-------------------------------|
| Temperature Range  | -20 to +60° C (-4 to +140° F) |
| Protection Class   | NEMA 4x (IP66)                |

Technical data are limit values.

If the product is integrated into systems or operated in combination with other devices, its permissible operating values can deviate from these limit values. Subject to technical modifications without prior notice.

Rev. A

## TECHNICAL DATA

| PERFORMANCE SPECIFICATIONS                           |  |
|--|--|
| Input Impedance                                      | 75 Ω                                       |
| Input Voltage  | 5.5-12.5 Vdc                               |
| Current Consumption                                  | 128 mA @ 12 Vdc                            |
| DC Blocking  | Jumper Selection on Board Input/Output     |
| Amplifier Spacing                                    | 250-500m                                   |
| Power Supply Diagnostics                             | PS-1571M, PS-1572M                         |
| Downstream   |  |
| Gain   | 10-25 dB                                   |
| Gain Adjust Range                                    | 15 dB (1 dB steps)                         |
| Gain Control   | MGC, AGC                                   |
| Bandwidth  | 15 MHz                                     |
| 3 dB Bandpass  | 145-160 MHz                                |
| 3 <sup>rd</sup> Order Intermod free Channel Capacity | 16 Voice/Data, 8 Video (2 per main branch) |
| Ethernet Bandpass                                    | 6.0 MHz                                    |
| DOCSIS 2.0 data rate                                 | 30.34 Mbps (64 QAM)                        |
| Third Order Intercept (3IP)                          | +31 dBm                                    |
| Upstream   |  |
| Gain   | 13-28 dB                                   |
| Gain Adjust Range                                    | 15 dB (1 dB steps)                         |
| Gain Control   | MGC, AGC                                   |
| Bandwidth  | 15 MHz                                     |
| 3 dB Bandpass  | 170-185 MHz                                |
| Ethernet Bandpass                                    | 6.4 MHz (max)                              |
| DOCSIS 2.0 data rate                                 | 20.48 Mbps (16 QAM)                        |
| Third Order Intercept (3IP)                          | +29 dBm                                    |