



RIS-AMD POWER SUPPLY DIAGNOSTIC LINE AMPLIFIER

- IS Power Supply Remote Diagnostics/Testing
- Intrinsically Safe MSHA Certified
- 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

Becker Mining Systems' smartcom® 150IS 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), IS Power Supply Diagnostics and Ethernet connectivity using standard cable modems. All smartcom® 150IS 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.

The layout rules for smartcom® 150IS systems can be found in the latest version of drawing MSHA-IS-01.

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)

APPROVALS

MSHA	#23-A050001-0
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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. G

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 rd 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