



UBDA450WW# UHF AMPLIFIER

- Automatic gain control
- 5 MHz separation between uplink and downlink bands
- Enables voice communication throughout tunnels, mines, and buildings

FEATURES

Becker Mining Systems' smartcom® UHF Line Amplifiers compensate for Leaky Feeder and splitting losses. The UHF Bi-Directional Amplifier enables voice communication throughout tunnels, mines and buildings.

The UHF band, which extends from 435 MHz to 455 MHz on the uplink and from 460 MHz to 480 MHz on the downlink, provides for 16 to 32 noise-free voice radio channels.

Local and Remote Diagnostics and accurate Automatic Gain Control (AGC) without Return Pilot noise buildup are built into every amplifier.

2 year component and workmanship warranty.

TECHNICAL DATA

PERFORMANCE SPECIFICATIONS	
Input Impedance	50 Ω
Input Voltage	10.5 V to 30 V
Current Consumption	200 mA @ 12 V, 150 mA @ 16 V, 110 mA @ 24 V
DC Blocking	No
Amplifier Spacing	up to 500m
Attenuation Adjust Range	0 - 31.5dB (0.5dB steps)
Voice Upstream/Downstream	
Gain	27.6dB @ 435 MHz, 28.3dB @ 455MHz, 28.5dB @ 460MHz, 29.2dB @ 480MHz
Gain Control	MGC, AGC
Bandwidth (3dB)	20 MHz
3 dB Bandpass	435 - 455 MHz (uplink) 460 - 480 MHz (downlink)
Passband Ripple	<1dB

MECHANICAL DATA	
Dimensions (L x H x W)	270 mm x 125 mm x 105 mm
Weight	850g
Enclosure	ABS, anti-static
Connectors	N-Type Jack

ENVIRONMENTAL DATA	
Temperature Range	-20 to +60 °C
Protection Class	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