

MAIN FEATURES

- ❖ Single frequency band
- ❖ High power amplifier
- ❖ Low distortion
- ❖ Fan cooling
- ❖ Remote control through the RF fiber link



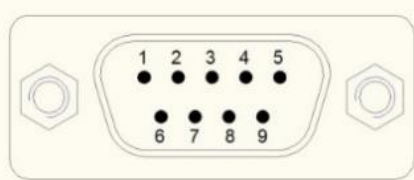
DESCRIPTION

BRSF10 is an optical slave repeater unit, built with high power amplifier, and it is part of BHE's FM broadcast solution. It operates as a single unit to amplify a certain frequency band, when connecting it to a BHE Optical Master Unit using a Single Mode Optical Fiber Link. The BRSF10 can be controlled on the local Ethernet or remotely through the RF Fiberlink. The repeater has an indoor rack-mounted enclosure with a temperature-controlled fan. The unit is used in a fiber optic link environment of repeaters in special places like tunnels or underground stations to increase the reliability and availability of the radio signal retransmission system.

SPECIFICATIONS

ELECTRICAL PARAMETERS	
Frequency band	87.5 – 108 MHz
Output VSWR	3:1
Output power, one channel	40 dBm
Output power, composite	29 dBm @ 2 channel, 26 dBm @ 4 channel
Output IP3 @ 25 dBm	+62 dBm typical
Nominal gain	47 dB typical
Gain setting range	47 to 16 dB adjustable in 1dB steps
Gain flatness and variation	<2 dB
Harmonics	According to the ETSI regulation
RF_MON attenuation	50 dB typical to main line
Optical module maximum RF input power	+5 dBm
Power supply voltage	48 VDC
Power consumption	<120 W
MECHANICAL PARAMETERS	
Type of power supply connector	NC3MD-LX, Neutrik, XLR, 3 pole
Type of optical connector	FC/APC
Type of RF connectors	N – female for RF_OUT; BNC – female for RF_MON
Weight	<15 kg
Dimensions	19" 3U (see outline dimensions)
ENVIRONMENTAL PARAMETERS	
Operating temperature range	0 °C ... +45 °C
Storage temperature range	-30 °C ... +70 °C
Relative humidity	<75%, non-condensing
Cooling	Switched forced cooling
Degree of protection	IP20 Indoor

SOFTWARE PARAMETERS			
Wired control		Ethernet (SNMP v1 / v2c)	
Alarm I/O		User configurable sum alarm output (dry contact), SNMP notifications, status LED	
Remote control		Through optical fiber via master unit	
SUM ALARM CONNECTOR PINOUT (D-SUB MALE) ⁽¹⁾			
Pin no.	Function	Pin no.	Function
1	Dry Contact	6	N.C.
2	Dry Contact	7	N.C.
3	N.C.	8	N.C.
4	Mute In	9	N.C.
5	GND	-	-

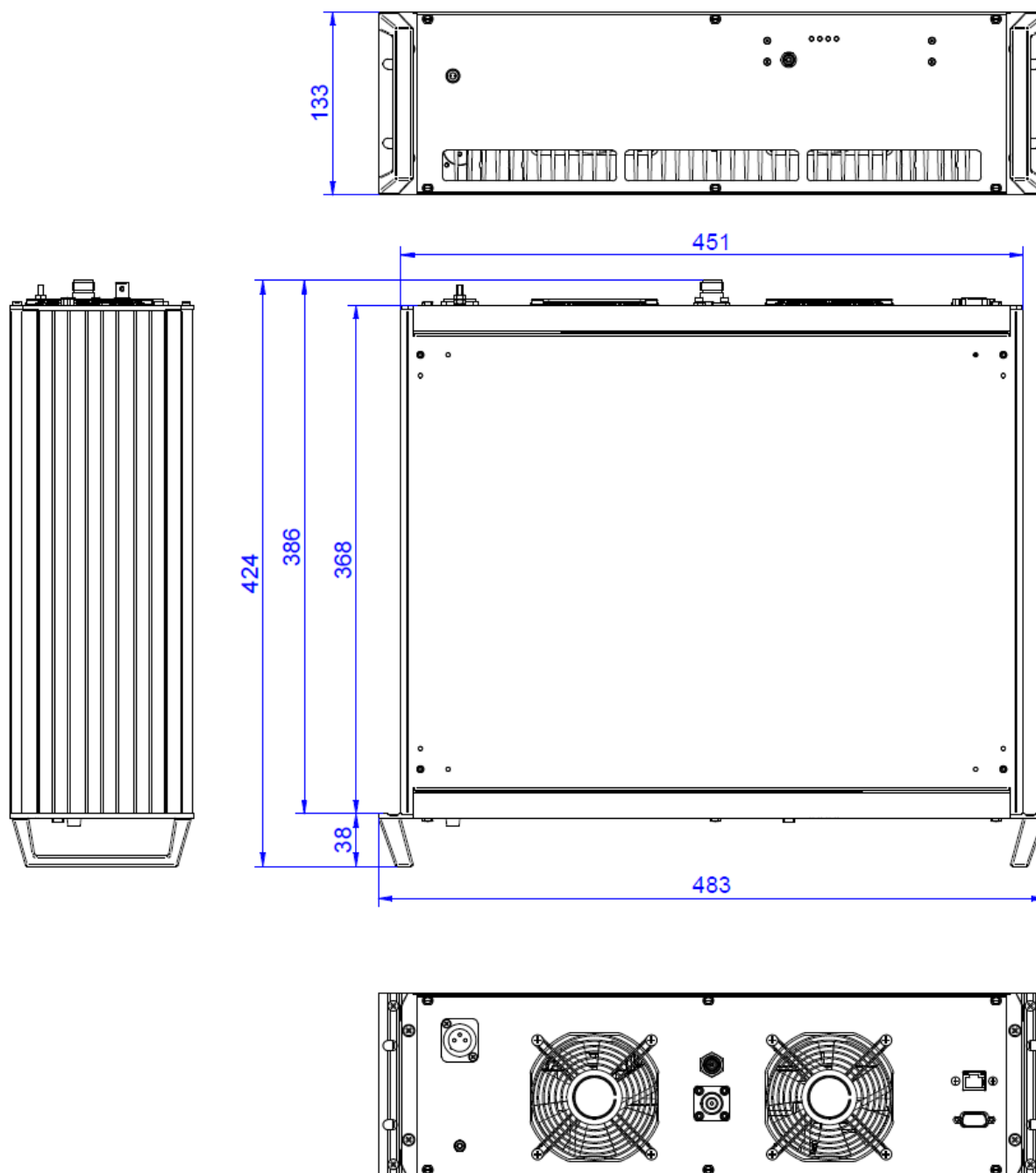


POWER SUPPLY CONNECTOR PINOUT (NEUTRIK, NC3MD-LX)			
Pin no.	Function		
1	GND		
2	+48 VDC (+)		
3	0 VDC (-)		

Specifications are subject to change without notice.

(1) In POWERED OFF state the relay will be open. The operation of the Dry Contact relay is configurable by the user.

OUTLINE DRAWING (mm)



ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BRSF10K11256	BRSF10, 10W, 87.5-108 MHz, G=55dB, 48 VDC, 19" 3U, 1x N fem, FC/APC, SNMP, FM macro slave repeater

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRSF10-LM-K11256	V02	2023-09-15