

MAIN FEATURES

- ❖ High output power
- ❖ Two independent amplifier covering dual frequency band
- ❖ Low distortion
- ❖ 3U high, 19" wide subrack
- ❖ SNMP control



DESCRIPTION

BRRC10 is the high power amplifier part of BHE's FM/DAB sound broadcast solution. It can be operated as a single unit to amplify two different frequency bands, when connecting it in chain with the relevant channel units (BRRF14/ BRRD14). BRRC10 consists of two independent amplifiers controlled via Ethernet. Built-in duplex filters split and combine the two bands at the input and output. Both amplifiers are built-in a 19" rack. These unit can be combined with BHE rackmount FM, DAB, VHF and TETRA repeaters fulfilling the various communications need of special places like in tunnels or in underground stations.

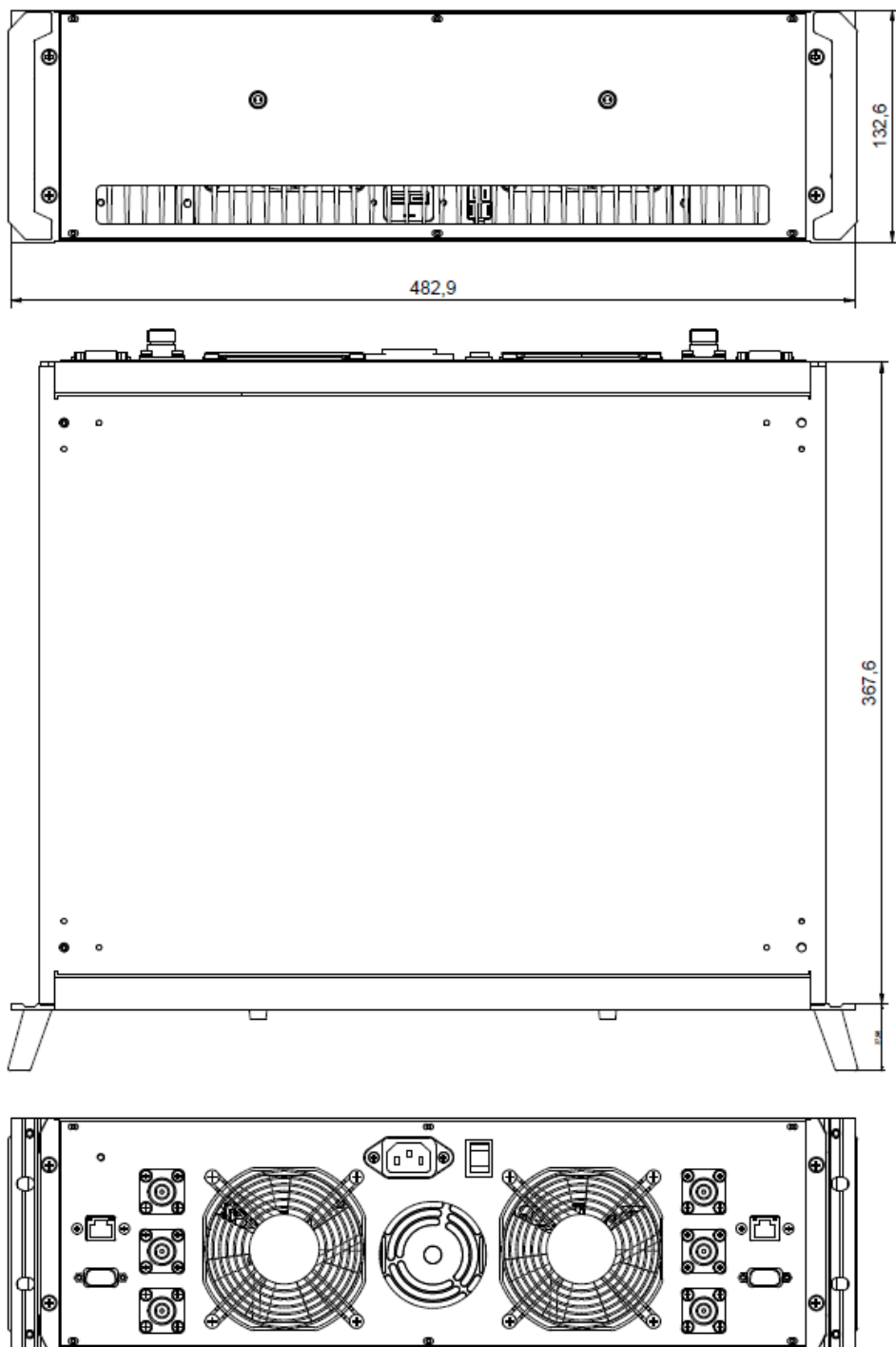
SPECIFICATIONS

ELECTRICAL PARAMETERS	
Frequency range	87.5 – 108 MHz, 210 – 240 MHz
Input VSWR (all inputs)	1.2:1 typical
Number of bands	2, independent amplifiers
Nominal input level	-15dBm / -18dBm typical @ 16 FM channels/ 2 DAB ensembles
Max. Gain	45dB typical
Gain flatness and variation	<2dB
Programmable attenuation	0 – 30dB
Gain step	1dB
Output IP3	+61dBm/ +57dBm typical
Harmonics	<-80dBc
Output VSWR	2:1
Output Power , One channel	40dBm / 35dBm
Output Power , Composite	30dBm / 28dBm
Control and monitoring	via ETHERNET and directly
Power supply voltage	100 – 240 VAC, 50 – 60 Hz
Power consumption	<220 W
MECHANICAL PARAMETERS	
Type of RF connectors	N – female
Control Connectors	RJ45 (LAN) and DSUB-9 male (direct)
Weight	<14 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	
Digital Inputs on DSUB-9 connector	Mute: Active Low optocoupler (3.3V) anode
Digital Outputs on DSUB-9 connector	Alarm: Normally Open Relay output to GND
Two Colour Status LED on front panel	Firmware dependant - GREEN in normal operation
Monitoring (Only via LAN)	Output RF power (reflected and forward) Amplifier Current, Internal DC voltages, Temperature

Specifications are subject to change without notice.

OUTLINE DRAWING (mm)





BRRC10 **Dual Band FM/DAB Power Amplifier**

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BRRC10K10116	BRRC10 10W, 87.5-108 MHz, 174-240 MHz, FM/DAB dual high power PAM rack
BRRC10K10189	BRRC10A1 10W, 87.5-108 MHz, 174-240 MHz, FM/DAB dual high power amplifier, black front plate

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRRC10	V01	2023-03-31

