

MAIN FEATURES

- ❖ Medium output power
- ❖ Full band amplifier
- ❖ Max. 3 RF inputs
- ❖ Low distortion
- ❖ Passive heatsink
- ❖ 3U high modules
- ❖ Fit into 19" BHE subrack



DESCRIPTION

BRRF25 is the medium output power amplifier component of BHE's FM and DAB solution. It can be operated as a single unit to amplify the whole frequency band, or it can amplify only the selected channel when connected in a chain configuration with the relevant channel unit (BRRF14 / BRRF19). One amplifier can serve several channel modules. Placed in a BHE subrack, these units can be combined with BHE rackmount TETRA repeaters to fulfill the various communications needs of special locations like tunnels or underground stations.

SPECIFICATIONS

RF INPUT PARAMETERS	
Number of input ports	Maximum 3 independent, combined inside
Frequency range	88 – 108 MHz
Input VSWR (all inputs)	1.2:1
RF input level	+16 dBm maximum per input
RF OUTPUT PARAMETERS	
Number of output ports	1 High power, 1 Low power monitor
Max. gain	40 dB typical (2, 3 RF input), 45 dB typical (1 RF input)
Low power output loss to main	50 dB typical
Programmable attenuation	0 – 31 dB
Gain step	1 dB
Output 1dB compression@+25°C	+35 dBm typical
Output IP3 (inband, two signals, Δf=1MHz) @+25°C	+49 dBm typical
Gain flatness	<2 dB
Gain variation	<2 dB
Harmonics	<-70 dBc
Output VSWR	2:1
MECHANICAL PARAMETERS	
RF inputs, output, monitor	DIN41612 Coax insert
DC input, Control connector	DIN41612
Power supply voltage	12 VDC
Power supply current	1050 mA typical @ +12 V
Power consumption	~13 W
Weight	1.5 kg
Dimensions	188 x 100 x 75.4 mm (see outline dimensions)

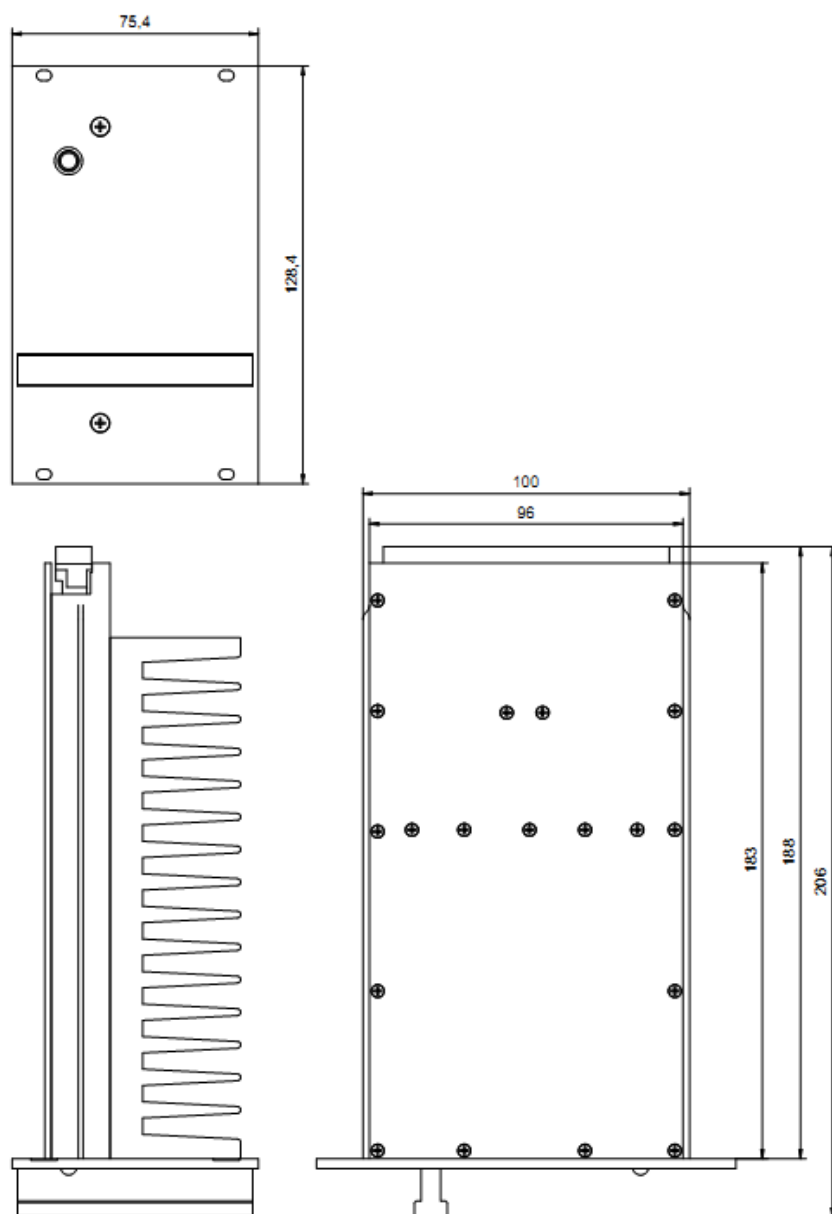


BRRF25 FM Power Amplifier Module

ENVIRONMENTAL PARAMETERS	
Operating temperature range	-20°C ... +50°C
Storage temperature range	-30°C ... +70°C
Humidity	95% (not condensing)
Cooling	Convection
Degree of protection	IP20 Indoor
SOFTWARE CHARACTERISTICS	
Control and monitoring	Via LAN. SNMP interface and web server available.
Digital inputs	Mute + 2 other data in, firmware dependent
Digital outputs	Alarm open collector +2 other data out, firmware dependent
Multicolour Status LED on front panel	RED on Alarm, GREEN during normal operation
Monitoring	Output RF power (reflected and forward) Internal DC voltages, Temperature

Specifications are subject to change without notice.

OUTLINE DRAWING (mm)



ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BRRF25K11158	BRRF25E1 FM PAM, P1dB: 34dBm, f: 88-108 MHz, G: 40 dB, 15HP, 19" 3U module, SNMP, Web server

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRRDF25-LM-K11158	V01	2023-10-11