

DAB Power Amplifier

MAIN FEATURES

- High output power
- Full band amplifier
- Low distortion
- ❖ 3U high, 19" wide frame, fit into rack
- Front panel LED for status monitoring

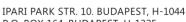


DESCRIPTION

BRRD16S is the high-power amplifier part of BHE's DAB broadcast solution. It can be operated as a single unit to amplify the whole respective band, or in a cascaded arrangement with the relevant channel selector units (e. g. BRRD14). In the latter case, only the selected channels are amplified. BRRD16S is equipped with one DAB broadcast amplifier with Ethernet control. A single amplifier can serve several channel modules. This unit can be combined with BHE rackmount FM, DAB, VHF and TETRA repeaters fulfilling the various communications needs of special places like tunnels or underground stations.

SPECIFICATIONS

RF INPUT PARAMETERS		
Number of input ports	1	
Frequency bands	174 – 240 MHz	
Input VSWR (all inputs)	1.7:1 typ.	
RF input level	+16 dBm maximum per input	
Nominal input level at max. gain	-15 dBm	
RF OUTPUT PARAMETERS		
Number of output ports	1 High power, 1 Low power monitor	
Output power, one ensemble	35 dBm @35 dB MER	
0.1.1.	29 dBm@ 2 channel, 26 dBm@ 4 channel, ETSI	
Output power, composite	Compliant	
Nominal gain	43 dB typical	
Gain setting range	0 – 31dB in 1dB steps	
Gain flatness	<2 dB	
Output IP3	+58 dBm typical	
Harmonics	<-80 dBc	
Output VSWR	2:1	
MECHANICAL PARAMETERS		
T	N – females for RFIN, RFOUT, BNC – female for	
Type and number of RF connector	monitoring	
Control connectors	RJ45 (LAN) and DSUB-9 male (direct)	
Power supply voltage	110 – 240V AC, nominal 230V, 50-60Hz	
Power supply connector	IEC C14 male (accessory Plug Type F)	
Power consumption	120 W typical, 170 W max.	
Dimension	19" 3U (see outline dimensions)	
Weight	10.5 kg	







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ENVIRONM	ENTAL PARAMETERS			
Operating temperature range		0 °C +50 °C		
Storage temperature range		-30 °C +70 °C		
Relative humidity		<75%, non-condensing		
Cooling		Switched forced cooling		
Degree of protection		IP20 Indoor		
SOFTWARE	PARAMETERS			
Monitoring & control		Via Ethernet, using SNMP v1/v2c protocol or the web user interface		
Monitored parameters		Forward/reverse output power, internal DC voltages, temperature		
Alarm I/O		Status LED on front panel (two-color), SNMP trap messages, dry contact (summary alarm) output		
Digital inputs		Mute: Active Low, firmware dependent		
Digital outputs		Alarm: Dry contact		
SUM ALARM AND DRY CONTACT CONNECTOR PINOUT (DSUB9 MALE) (1)				
Pin no.	Function	Pin no.	Function	
1	Dry Contact	6	N.C.	1 2 3 4 5
2	Dry Contact	7	N.C.	
3	N.C.	8	N.C.	

N.C.

Specifications are subject to change without notice.

Mute In

GND

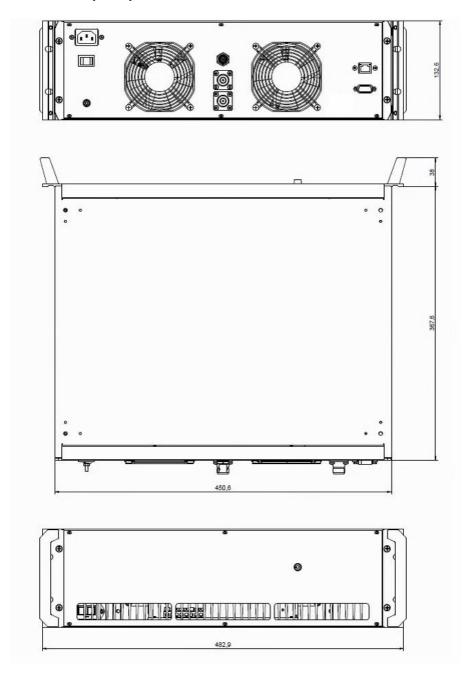
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⁽¹⁾ In POWERED OFF state the relay will be open. The operation of the Dry Contact relay is configurable by the user.

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OUTLINE DRAWING (mm)



ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION	
BRRD16K00246	BRRD16S 10W, 210-240MHz, high power single channel DAB	
BRRD 10K00240	amplifier, 19" subrack	

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRRD16-LM-K00246	V01	2023-10-17