

## MAIN FEATURES

- ❖ Point to point configuration
- ❖ Supports up to 8 slaves
- ❖ Automatic optical power control
- ❖ Remote supervision of slave units
- ❖ SNMP support



## DESCRIPTION

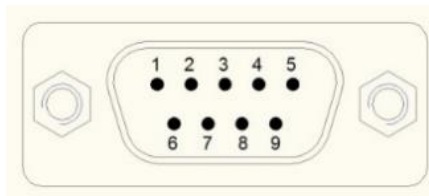
This master repeater is intended to be used to convert signals from RF to optical and supply the remote optical slave repeaters. Typical applications are long tunnel sections, in-building systems, large area outdoor coverage and long distance feed areas where the cost of the traditional RF cable is more expensive than the economical optical fiber solutions. The standard 19" cabinet has up to 8 optical converters each with FC/APC optical female connectors. All 8 downlink gain values can be set individually.

The broadcast and M&C signals are transmitted on the same optical cable. A single physical connection is used for the remote supervision and alarm handling functions, which results in a reliable communication link. The master unit can be monitored and controlled via its Ethernet connector using SNMP protocol or via the optional 2G/4G modem. All connected slave units can be remotely supervised through the optical connection.

## SPECIFICATIONS

ELECTRICAL PARAMETERS	
Frequency band	FM – DAB: 87.5 – 240 MHz
Input VSWR	<2.5
Nominal gain	-20 dB
Gain setting range	-20 to -50 dB adjustable in 1 dB steps
Gain ripple	<±1.5 dB maximum
Gain stability	<±1 dB (within operating temp. range)
Maximum RF input power	+20 dBm
Optical module maximum RF input power	+5 dBm
Maximum optical loss between master and slave	15 dBo
Power supply voltage	230 VAC, 50 – 60 Hz
Power consumption	10 W + 8 W / RF to Optical converter
MECHANICAL PARAMETERS	
Type of power supply connector	IEC C14 male (Accessory cable IEC C13 with type F plug)
Type of optical connectors	FC/APC
Type of RF connector	N – female
Number of RF connector	1, Combined FM – DAB port
Number of RF to optical converters	Maximum 8 x BRMF26
Weight	<19 kg
Dimensions	19" 4U (see outline dimensions)
ENVIRONMENTAL PARAMETERS	
Operating temperature range	0 °C ... +45 °C
Storage temperature range	-30 °C ... +70 °C
Relative humidity	<75%, non-condensing
Degree of protection	IP40 Indoor

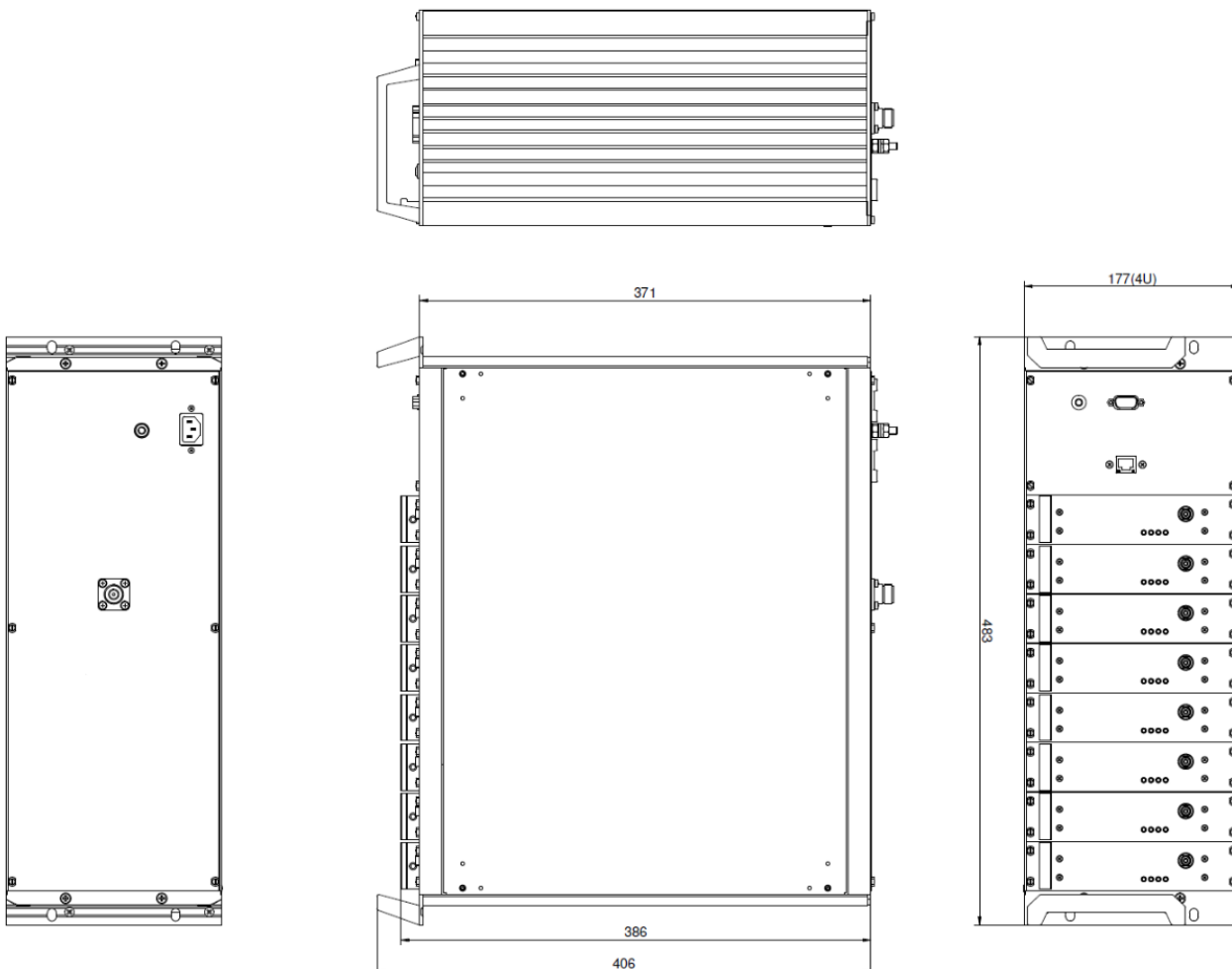
SOFTWARE PARAMETERS			
Wired control		Ethernet (SNMP v1 / v2c)	
Alarm I/O		4 external alarm inputs, user configurable sum alarm output (dry contact), SNMP notifications, status LED	
Wireless control (optional)		2G / 4G modem	
EXTERNAL ALARM AND SUM ALARM CONNECTOR PINOUT (D-SUB MALE) <sup>(1)</sup>			
Pin no.	Function	Pin no.	Function
1	Ext. Alarm IN 1	6	Ext. Alarm COMMON
2	Ext. Alarm IN 2	7	Dry Contact
3	N.C.	8	Ext. Alarm IN 3
4	Dry Contact	9	Ext. Alarm IN 4
5	Ext. Alarm COMMON	-	-



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)





## BRMF47 FM-DAB Optical Master Repeater

### ORDERING INFORMATION

MODEL NUMBER	FREQUENCY BAND	POWER SUPPLY	RF PORT	RF MODULES
BRMF47K10461	87.5-108 MHz / 174-240 MHz	12 VDC	Combined	8 x BRMF26
BRMF47K10575	87.5-108 MHz / 174-240 MHz	230 VAC	Combined	2 x BRMF26
BRMF47K10718	87.5-108 MHz / 174-240 MHz	2 x 48 VDC	Combined	8 x BRMF26
BRMF47K11067	174-240 MHz	2 x 48 VDC	Combined	8 x BRMF26
BRMF47K11231	169.65 +- 1MHz	230 VAC	Combined	6 x BRMF58

### DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRMF47	V01	2023-09-15