

TETRA is widely used to support the everyday life of fire brigades, police departments, emergency services, special forces as well as private / government owned companies worldwide.

The number of user is growing steadily thanks to its robustness and features needed by such organisations. This growing demand raises the need of extended bandwidth. BHE has been designing and manufacturing UHF & TETRA repeaters since 2006, offering full portfolio of analogue and digital off-air repeaters and optical master slaves too. The repeater family now is broadened by a set of new repeaters to support 6.5 MHz bandwidth. This document summarizes the new offering in this field.

## OFF-AIR REPEATERS

ANALOGUE

PICO



BRTS19

MINI



BRTM19

MINI



BRTM39

MACRO



BRTL39

DIGITAL

|       | MODEL  | RF GAIN      | DL               | UL               | CHANNEL SELECTIVE | WALL MOUNT | 19" RACK MOUNT | COMBINED | SEPARATED | 4G MODEM |
|-------|--------|--------------|------------------|------------------|-------------------|------------|----------------|----------|-----------|----------|
| PICO  | BRTS19 | 70 dB        | 18 dBm           | 18 dBm           |                   | ✓          |                | ✓        |           | ✓**      |
|       | BRTM19 | 55 dB*/70 dB | 20 dBm* / 22 dBm | 20 dBm* / 22 dBm |                   | ✓          |                | ✓        |           | ✓**      |
|       | BRTM29 | 70 dB        | 22 dBm           | 22 dBm           |                   |            | ✓              |          | ✓         | ✓**      |
| MINI  | BRTM39 | 76 dB        | 22 dBm* / 24 dBm | 22 dBm           | ✓                 | ✓          |                | ✓*       | ✓         | ✓**      |
|       | BRTM48 | 76 dB        | 24 dBm           | 22 dBm           | ✓                 |            | ✓              |          | ✓         | ✓**      |
| MACRO | BRTL34 | 90 dB        | 36 dBm           | 24 dBm           | ✓                 |            | ✓              |          | ✓         | ✓**      |
|       | BRTL39 | 90 dB        | 36 dBm           | 24 dBm           | ✓                 | ✓          |                | ✓        |           | ✓**      |
|       | BRTL47 | 90 dB        | 36 dBm           | 36 dBm           | ✓                 | ✓          |                | ✓        |           | ✓**      |
|       | BRTL49 | 90 dB        | 36 dBm           | 36 dBm           | ✓                 |            | ✓              | ✓        |           | ✓**      |

\* Belgian model  
\*\* optional

## OPTICAL REPEATERS

### MASTERS\*



**BRMF63**



**BRMF59**

| MODEL  | TECHNICAL |                            | RF BAND |            | CONSTRUCTION |                |                 |                      |                   |
|--------|-----------|----------------------------|---------|------------|--------------|----------------|-----------------|----------------------|-------------------|
|        | GAIN      | ABS. MAX INPUT POWER LEVEL | SINGLE  | EXTENDABLE | WALL MOUNT   | 19" RACK MOUNT | NUMBER OF SLOTS | MAX NUMBER OF SLAVES | REDUNDANT SUPPORT |
| BRMF59 | -10 dB    | +10 dBm                    | ✓       |            |              | ✓              | 2               | 8                    | ✓                 |
| BRMF63 | -20 dB    | +26 dBm                    | ✓       | ✓          |              | ✓              | 3-8             | 32                   | ✓                 |

### SLAVES\*



**BRTF29**



**BRTF26-E**

| MODEL    | TECHNICAL |                   | RF BAND |            | CONSTRUCTION   |                   |                        |
|----------|-----------|-------------------|---------|------------|----------------|-------------------|------------------------|
|          | GAIN MAX  | OUTPUT POWER/BAND | SINGLE  | WALL MOUNT | 19" RACK MOUNT | DUAL OPTICAL FEED | DAISY CHAIN CAPABILITY |
| BRTF48   | 50 dB     | 24 dBm            | ✓       |            | ✓              |                   | ✓                      |
| BRTF35   | 50 dB     | 24 dBm            | ✓       | ✓          |                |                   | ✓                      |
| BRTF26-E | 65 dB     | 33 dBm            | ✓       | ✓          | ✓              | ✓                 | ✓                      |
| BRTF32   | 65 dB     | 36 dBm            | ✓       |            | ✓              |                   | ✓                      |
| BRTF36   | 65 dB     | 36 dBm            | ✓       | ✓          |                |                   | ✓                      |

\*Dual band option is also available.