



## Application

- EGSM / GSM / EDGE / GPRS / UMTS/LTE
- Indoor coverage enhancement
- Buildings, Shopping malls

## Key Features

- Very Compact design
- +15 dBm output power
- Selective Band
- Multi-band configuration
- Built-in coverage antenna
- Remote by SMS

## Benefits

- No settings
- Cost effective solution
- To be installed by skilled personnel
- Fast and easy deployment

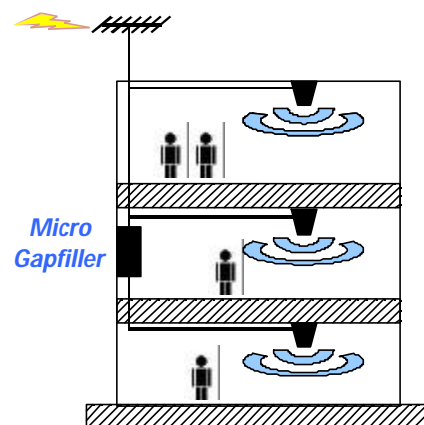
## Contact us

Distributore per l'Italia :

**PROTEL SAS**  
Via Magellano 3 A/B6  
Cesano Boscone (MI)

# Solution for GSM/UMTS/LTE coverage

## GSM/UMTS/LTE Micro-Repeater Indoor



## Cost effective way for inside coverage

The **GSM/UMTS/LTE Micro-Repeater** enhances the coverage in the infrastructures like buildings, shopping malls, private houses, etc... where the reception from the base stations (BTS) is difficult or even impossible. Indeed, the attenuation of the signal through the walls can be very important, and makes it impossible to use inside the buildings the mobile phones.

The **GSM/UMTS/LTE Micro-Gapfiller** consists of whole-integrated equipment that filters and amplifies the signal from outdoor into the infrastructure to cover. Very compact and wall-mounted, the GSM/UMTS Micro-Repeater is very discrete and can be installed anywhere.

The **GSM/UMTS/LTE Micro-Gapfiller** can be managed by SMS with an optional module.

The coverage can be insured with the built-in antenna (optional) or an external distribution system.



Distributore per l'Italia: PROTEL s.a.s. – [www.protel.it](http://www.protel.it) – tel.: 0248600265

041 – GSM UMTS LTE Micro-Repeater – ed17



# Solution for GSM/UMTS/LTE coverage

## GSM/UMTS/LTE Micro-Repeater Indoor

RF Features		800	900	1800	2100	2600
Frequency band	<i>Uplink</i>	842 - 852 MHz	880 - 915 MHz	1710 – 1785 MHz	1920 – 1980 MHz	2500 – 2515 MHz
	<i>Downlink</i>	801 - 811 MHz	925 - 960 MHz	1805 – 1880 MHz	2110 – 2170 MHz	2620 – 2635 MHz
Operating bandwidth		According with operator				
Automatic Gain Control	<i>Uplink</i>	= 70 dB	= 65 dB	= 60 dB		= 70 dB
	<i>Downlink</i>	= 70 dB	= 65 dB	= 60 dB		= 70 dB
Selectivity		= 20 dBc	= 50 dBc			= 20 dBc
Maximum output power	<i>Uplink</i>	= +15 dBm	= +13 dBm		= +10 dBm	= +15 dBm
	<i>Downlink</i> (2dBi incl.)	= +17 dBm	= +15 dBm		= +12 dBm	= +17 dBm
Spurious emissions		= - 36 dBm		= - 30 dBm		= - 36 dBm
Noise Figure		= 7 dB				

Mechanical Features			Single Band		Dual Band	Tri-Band
Frequency band			900 1800 2100	800 2600	900-1800 1800-2100	900-1800-2100
Power supply voltage			230 VAC ± 10%			
Power consumption			10 W	20 W	25 W	40 W
VSWR			1,5:1			
Dimensions	Height		168 mm			
	Depth	Length	119 mm	228 mm	266 mm	413 mm
		Standard version	67 mm	70 mm	67 mm	
		With monitoring module	87 mm	na	87 mm	
Weight			0,74 Kg	1,6 Kg		2,46 Kg
Connectors		Donor	SMA f	N f	SMA f	
		Coverage	SMA f			
Rating class			IP20	IP40	IP20	
Temperature range			-10°C to +55°C			
Monitoring			Alarm “Antenna Isolation” / Alarm “Gain limiter” Remote monitoring by SMS modem (optional) NMS available (optional) Green Led : Operation OK / Orange Led : Alarm			

### Mounting Plan 900-1800-2100



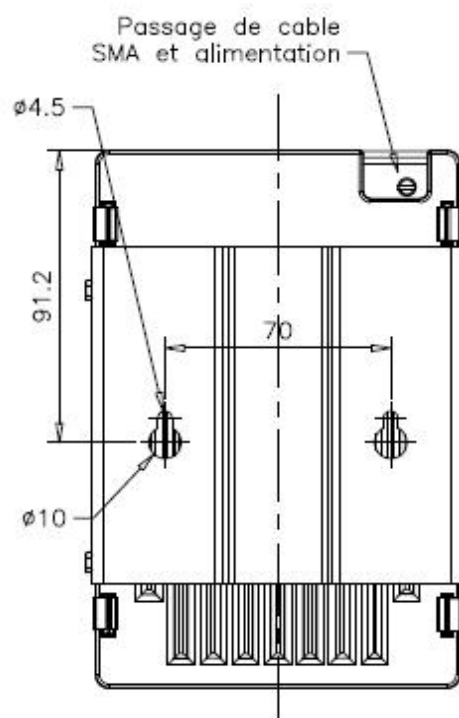
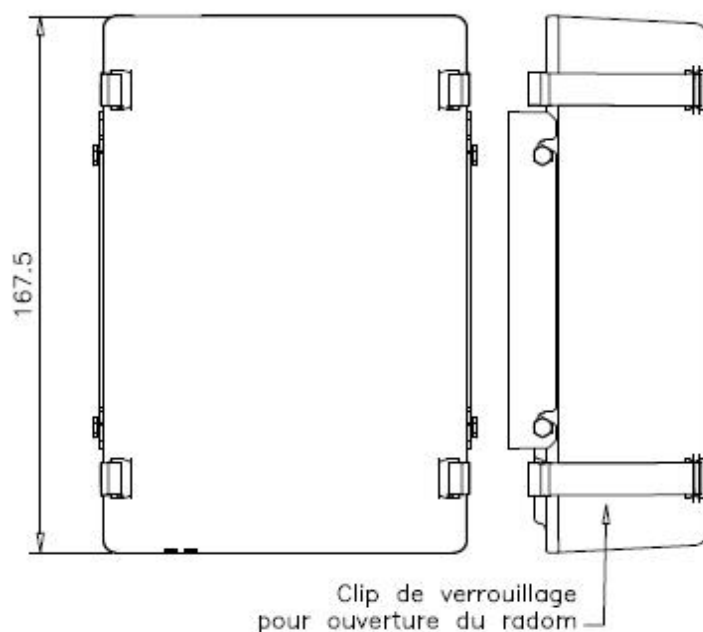
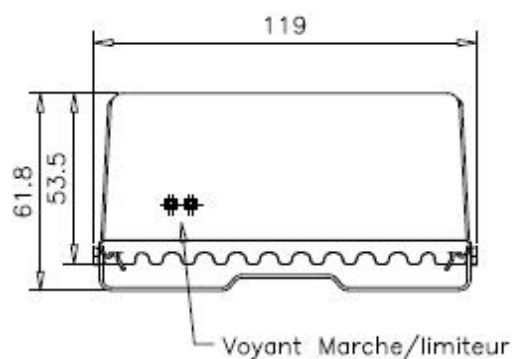
Single Band Micro-Repeater



Dual Band Micro-Repeater



Tri-Band Micro-Repeater





# Solution for GSM/UMTS/LTE coverage

## *GSM/UMTS/LTE Micro-Repeater Indoor*

### **Mounting Plan 800-2600**

