



DATASHEET	Pages : 6 Reference : 010022E
Micro Repeater GSM900/GSM1800/UMTS2100	Date of application : 25/06/2015

❖ **General description :**

The micro repeater is a radiocommunication product for improving the radio coverage of the cellular radio system in the GSM900 / GSM1800 / UMTS bands.

This equipment is intended primarily to provide indoor coverage for low-volume premises such as shops, showrooms, local business, medical office.



Ex : Coverage exhibition hall

Depending on customer requirements and to optimize the cost of coverage, Selecom offers a complete range of micro repeaters single or dual -band in the simple or double box.

Coverage can be provided with integrated antenna (Optional) or an external distribution system. Micro Repeater provides the possibility of being managed by SMS with an optional module.



Ex : Coverage hotel room

Double box available in :

- **Single-band with Mimo,**
- **Dual-band.**



Box available in :

- **Dual-band with Mimo,**
- **Tri-band,**
- **Tri bande with MIMO.**



Simple box available in :

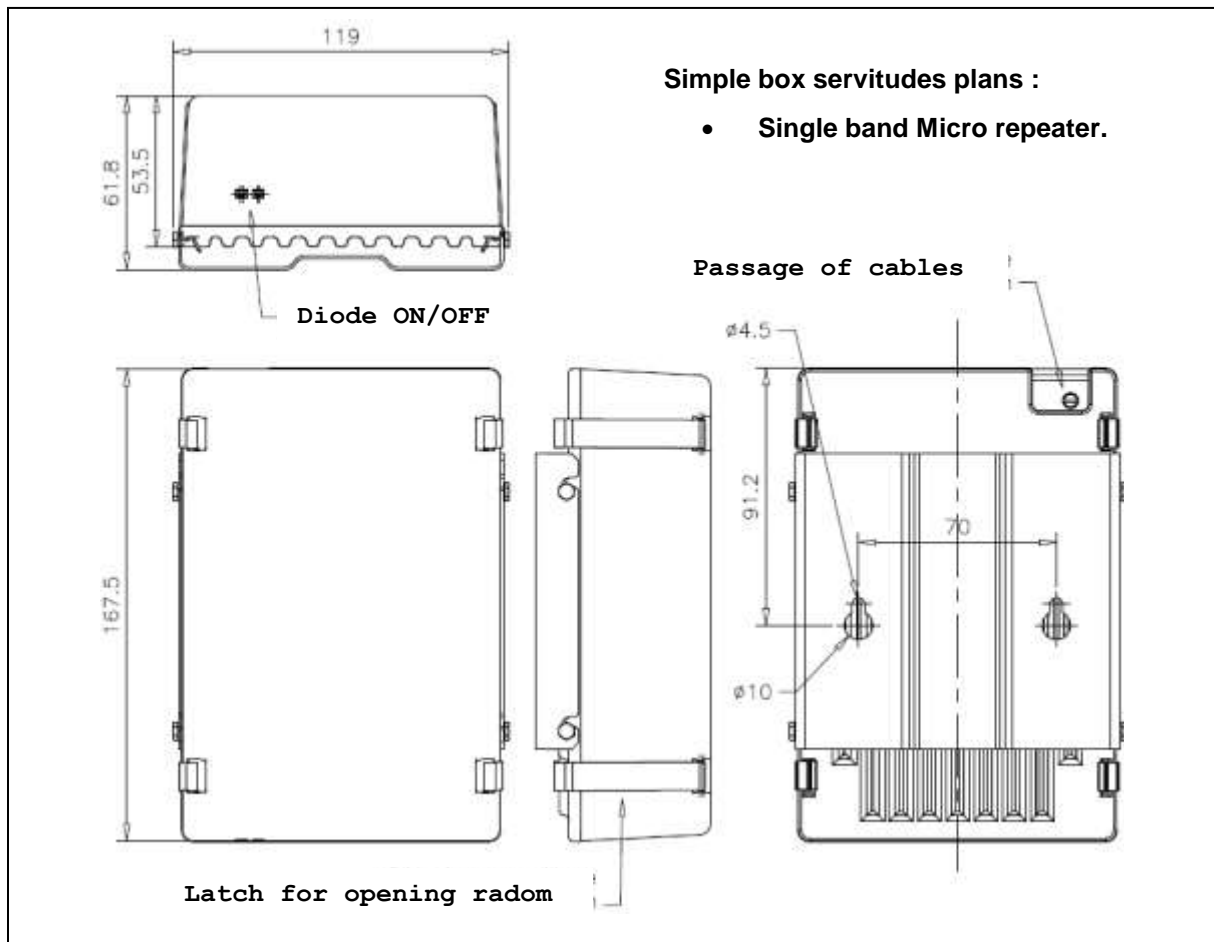
- **Single-band micro-repeater.**



RF characteristics

✓ Single –band : GSM900/GSM1800/UMTS

Frequency band	GSM 900 MHz	GSM 1800 MHz	UMTS
RX band (MHz)	880 - 915	1710 - 1785	1920 - 1980
TX band (MHz)	925 - 960	1805 - 1880	2110 - 2170
Output power	+ 13dBm	+ 13dBm	+ 10dBm
Gain	65 dB	60 dB	60 dB
Spurious emission	≤ - 36dBm	≤ - 30dBm	≤ - 30dBm
Bandwidth	Adapted according to operator		
Ripple in band	< ± 2dB	< ± 2dB	< ± 2dB
Noise factor	≤ 7dB	≤ 7dB	≤ 7dB
ROS	1,5 : 1	1,5 : 1	1,5 : 1
Energy	12 volts DC		

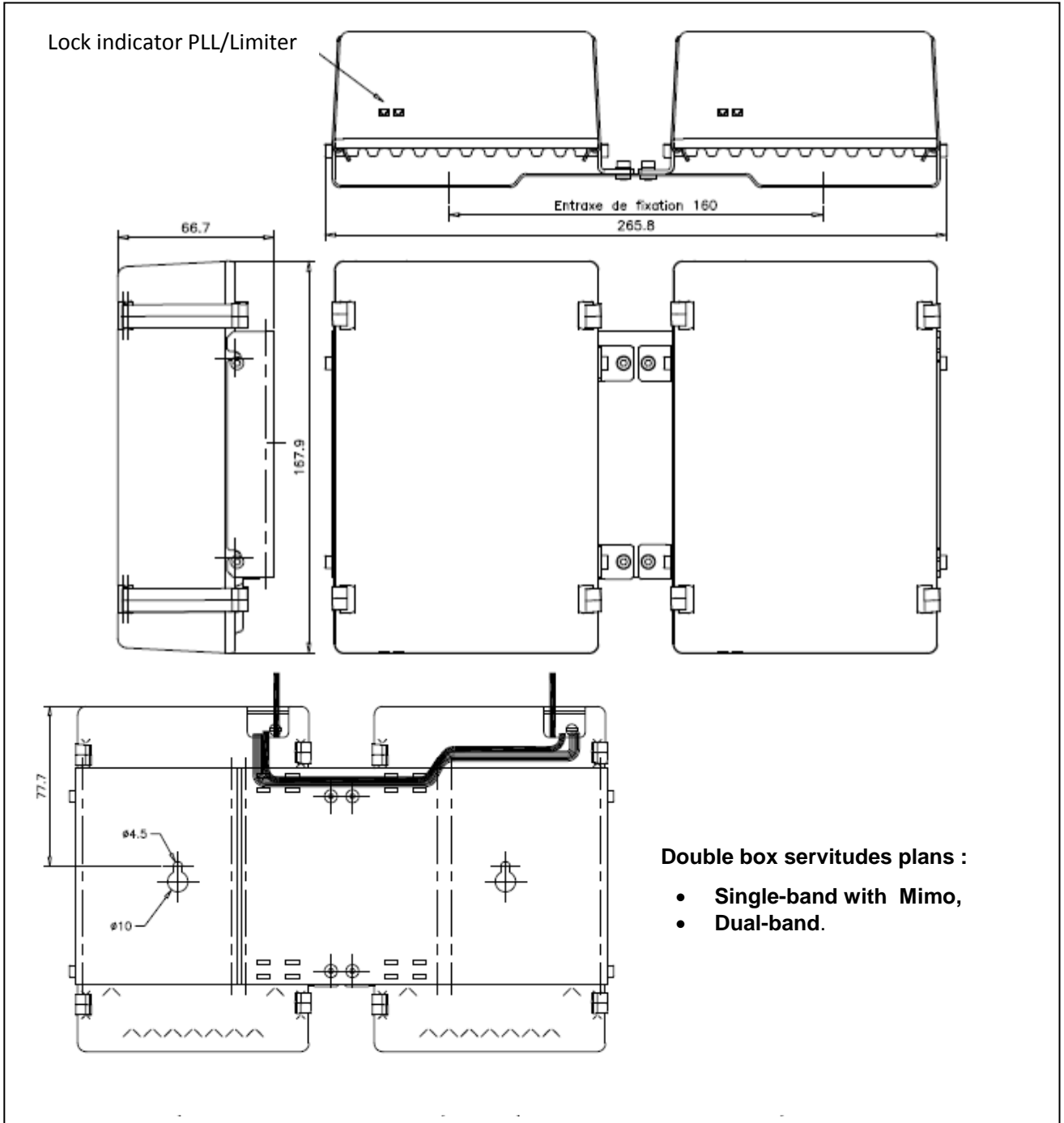


✓ Dual –band : GSM900/GSM1800 or UMTS

Frequency band	GSM 900 MHz	GSM 1800 MHz	UMTS
RX band (MHz)	880 - 915	1710 - 1785	1920 - 1980
TX band (MHz)	925 - 960	1805 - 1880	2110 - 2170
Output power	+ 12dBm	+ 12dBm	+ 9dBm
Gain	64 dB	59 dB	59 dB
Spurious emission	≤ - 36dBm	≤ - 30dBm	≤ - 30dBm
Bandwidth	Adapted according to operator		
Ripple in band	< ± 2dB	< ± 2dB	< ± 2dB
ROS	1,5 : 1	1,5 : 1	1,5 : 1
Energy	12 volts DC		

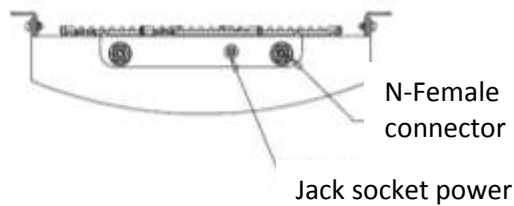
✓ Dual –band : GSM900/GSM900

Frequency band	GSM 900 MHz	GSM 900 MHz
RX band (MHz)	880 - 915	880 - 915
TX band (MHz)	925 - 960	925 - 960
Output power	+ 10dBm	+ 10dBm
Gain	62 dB	62 dB
Spurious emission	≤ - 36dBm	≤ - 36dBm
Bandwidth	Adapted according to operator	
Ripple in band	< ± 2dB	< ± 2dB
Noise factor	≤ 7dB	≤ 7dB
ROS	1,5 : 1	1,5 : 1
Energy	12 volts DC	



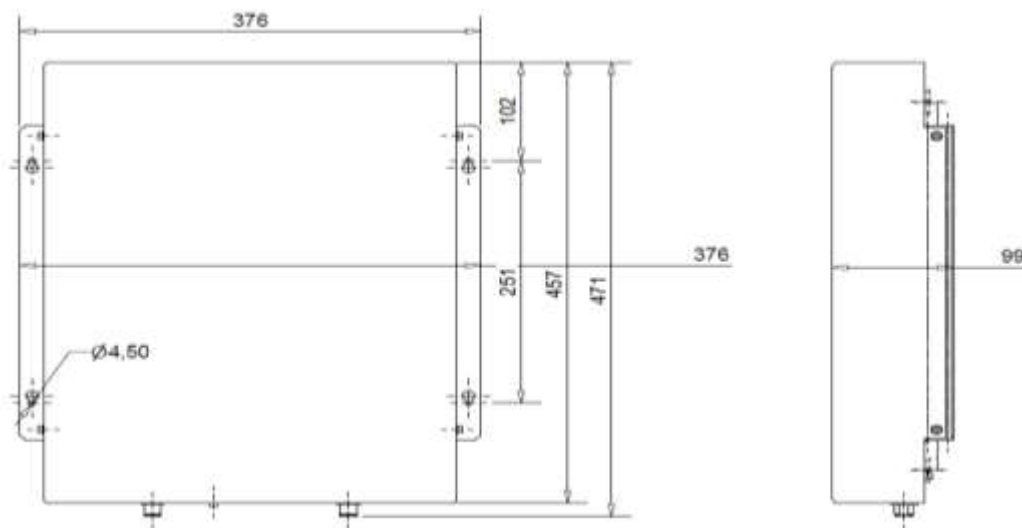
✓ **Tri –band : GSM900/GSM1800/ UMTS**

Frequency band	GSM 900 MHz	GSM 1800 MHz	UMTS 2100 MHz
RX band (MHz)	880 - 915	1725 - 1785	1920 - 1980
TX band (MHz)	925 - 960	1820 - 1880	2110 - 2170
Output power	+ 13dBm	+ 13dBm	+ 10dBm
Gain	65 dB	60 dB	60 dB
Spurious emission	≤ - 36dBm	≤ - 30dBm	≤ - 30dBm
Bandwidth	35MHz	60MHz	60MHz
Ripple in band	< ± 3dB	< ± 3dB	< ± 3dB
Noise factor	≤ 7dB	≤ 7dB	≤ 7dB
ROS	1.5 : 1	1.5 : 1	1.5 : 1
Energy	12 volts DC		



Box servitudes plans :

- Dual-band with Mimo,
- Tri-band,
- Tri band with MIMO.



Mechanical and electrical characteristics

		Single- Band	Dual-Band or Single- Band with MIMO	Tri-Band or Dual-Band with MIMO	Tri-Band with MIMO	
Frequency band		900 MHz 1800 MHz 2100 MHz	900-1800 MHz 900-2100 MHz 1800-2100 MHz	900-1800-2100 Or (900-1800 Or 900-2100 Or 1800-2100) + 900 MIMO Or + 1800 MIMO Or + 2100 MIMO	900-1800-2100 + 900 MIMO Or + 1800 MIMO Or + 2100 MIMO	
Power supply		230 VAC ± 10%				
Power consumption		10 W	20 W	40 W	55 W	
VSWR		1,5:1				
Dimensions	Height	168 mm	168 mm	470 mm	TBD	
	Lenght	119 mm	266 mm	374 mm	TBD	
	Deph	Standard version	67 mm	67 mm	98 mm	TBD
		With mionitoring	87 mm	87 mm	NA	NA
Weight		0,74 Kg	1,6 Kg	2,46 Kg	TBD	
Connectors	Outdoor antenna	SMA f	N f	N f	N f	
	Remote antenna	SMA f	N f	N f	N f	
Protection class		IP20	IP20	IP40	IP40	
Temperature range		-10°C to +45°C				
Monitoring		Alarm "Antenna Isolation" / alarm "gain limiter" Remote monitoring via SMS modem (optional) Led green : OK / Led Orange: Alarm			/	