



DATASHEET		Pages : 05 Reference : 010068A
Optirep_SingleBand 800_900_1800_2100_2600 MHz		Date application : 06/09/2016

❖ **General description**

The **OPTIREP SingleBand** is flexible equipment that allows to ensure the continuity of mobile radiocommunications in the places or insufficiently covered infrastructure.

Built in IP65 box the repeaters can be installed indoor or outdoor and in the most difficult environments.

Its low power consumption allows to be powered by "solar panels".

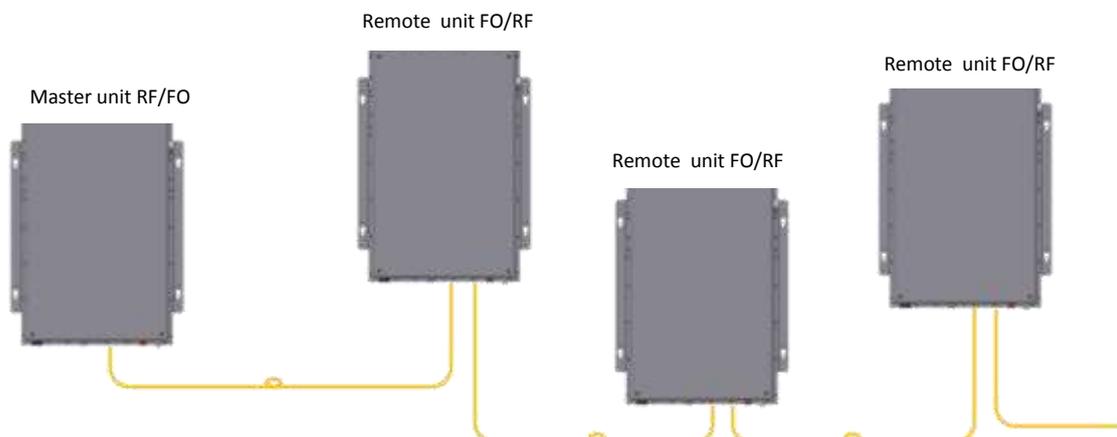
Equipment can be remotely managed using its supervisory module E2M (WEB server / integrated SNMP). Remote access is available via Ethernet and GPRS modem.

Optical distance 12 dBo (approx. 20 km)



Technical Characteristics system							
RF characteristics		700 MHz	800 MHz	900 MHz	1800 MHz	2100 MHz	2600 MHz
Frequency range	TX	758~788	791~821	925~960	1805~1880	2110~2170	2620~2690
	RX	703~733	832~862	880~915	1710~1785	1920~1980	2500~2570
Gain		60 – 90 dB					
Ripple in bandwidth		≤ 2dB					
Intermodulation		≤ -30 dBm @ ≥ 1 GHz ; ≤ -36 dBm @ ≤ 1 GHz					
Noise factor		≤ 5 dB @ Gain max					
Group delay		≤ 5 μs (Excluding fiber)					
Sub-band filtering							
		700 MHz	800 MHz	900 MHz	1800 MHz	2100 MHz	2600 MHz
Number of filter max		12					
For each filter	Adjustable bandwidth	from 100 kHz to 30 MHz		from 200 kHz to 35 MHz	from 200 kHz to 75 MHz	from 100 kHz to 60 MHz	from 100 kHz to 60 MHz
	Adjustable central frequency	from f ₀ to f ₀ + 15 MHz		from f ₀ to f ₀ + 17.5 MHz	from f ₀ to f ₀ + 35 MHz	from f ₀ to f ₀ + 30 MHz	from f ₀ to f ₀ + 35 MHz
	Adjustable attenuations	from 0 dB to -30 dB					

Technical Characteristics remote unit							
RF characteristics		700 MHz	800 MHz	900 MHz	1800 MHz	2100 MHz	2600 MHz
Frequency range	TX	758~788	791~821	925~960	1805~1880	2110~2170	2620~2690
	RX	703~733	832~862	880~915	1710~1785	1920~1980	2500~2570
UL composite nominal power	RF/FO master	+ 22 dBm					
DL composite nominal power	FO/RF remote	+ 36 dBm		+ 34 dBm		+ 36 dBm	
Optical links	RF/FO master	2 outputs including 1 available as an option for star chain configuration					
	FO/RF remote	2 outputs including 1 available as an option for daisy chain configuration					
Optical interface							
Technology used		Transmission / reception in WDM on a single fiber					
Wavelength emission	RF/FO master	1550 nm					
	FO/RF remote	1310 nm					
Optical Output Power		4 dBm ± 2 dB					
CAG (Automatic compensation of optical balance)		12 dB _o					
Optical connector		SC / APC					
Optical fiber		SMF G652D or G657A2					



Mechanical & Electrical characteristics		
❖ Electrical characteristics		
Voltage	230 Vac or 48 Vdc optional	
Power issued	130 W	
Efficacity	86%	
❖ Interface		
Connector	N-Female	
❖ Mechanical characteristics		
Dimensions except fixations (L x H x D)	Outdoor Box	350 X 550 X 102 mm
	Rack version 19"	sur demande
Weight	13 Kg	
Cooling	Natural convection	
Protection class	IP65	
Operating temperature	Between -20°C and 50°C	
❖ Monitoring		
Centralized in the master via TCP / IP connection on the fiber		

