

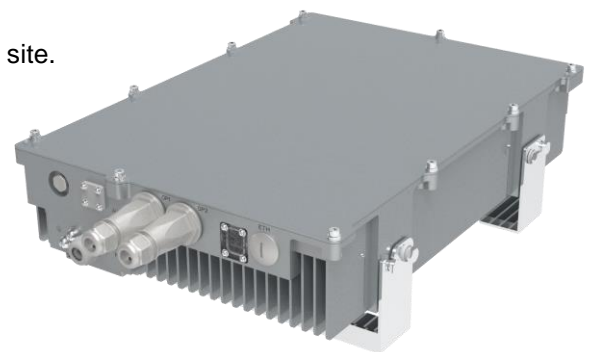
ComFlex Series Distributed Antenna System

RA-7900-M Dualband Fibre Optics Repeater-Master Unit

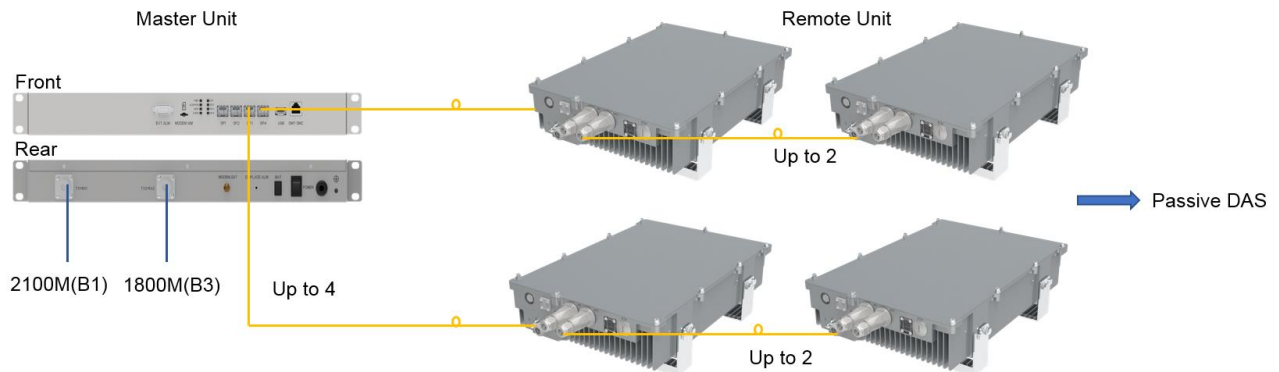
RA-7900-R Dualband Fibre Optics Repeater-Remote Unit

Features

- Supports 2100MHz (B1) and 1800MHz (B3) for NR and LTE.
- Supports field upgrade and remote upgrade.
- Small size and easy installation.
- Master unit supports 4 Remote Units directly, and Remote Unit can cascade up to 2 Maximum.
The Typical application is 6 Remote Units maximum for One MU on site.
- 60W(B1) + 60W (B3) Output power.
- Support automatic or manual time delay calibration to avoid co-channel interference.
- Support Local commissioning and Remote monitoring by CMS.



System Block Diagram



Specifications-Preliminary

Optical		
System		2100MHz (B1) and 1800MHz (B3)
Optical Fiber		Single Mode
Optical Wavelength	nm	1310 and 1550
Optical Output Power	dBm	-5 to 0
Data Rate	Gb/s	10.1376
Transmission Distance	km	10
Fiber Connectors		LC/UPC

Electrical				
System			2100MHz (B1)	1800MHz (B3)
SISO/MIMO			SISO	SISO
Frequency Range	Uplink	MHz	1920-1980	1710-1785
	Downlink		2110-2170	1805-1880
Operating Bandwidth		MHz	60	75
Instantaneous Bandwidth		MHz	60	75
Uplink Output Power		dBm	0	0
Downlink Output Power		dBm	48	48
Uplink Maximum Gain		dB	55	55
Downlink Maximum Gain		dB	55	55
ATT Adjustable Range (1dB step)		dB	Master Unit:0-20 Remote Unit: 0-15	Master Unit:0-20 Remote Unit: 0-15
Pass Band Ripple (p-p)		dB	≤ 4	≤ 4
Spurious Emission			3GPP TS 36.106 3GPP TS 38.106	3GPP TS 36.106 3GPP TS 38.106
Uplink Noise Figure at Maximum Gain		dB	≤ 5	≤ 5
System Delay		μsec	≤ 10	≤ 10
Delay Adjustment Range		μsec	≥ 100	≥ 100
VSWR			≤1.5	≤1.5
Absolute Maximum Uplink Input Power		dBm	-10	-10
Absolute Maximum Downlink Input Power		dBm	10	10

Mechanical---Master Unit		
Dimensions, H x W x D	mm	440 x 220 x 44
Weight (approx.)	kg	3.5
Power Supply	VAC	100-240 / 50 ± 5Hz
Power Consumption	W	45
RF Connectors		N-Female x 2
Operating Temperature	°C	-10 to +45
Operating Humidity		≤ 85%
IP Level		IP30
Enclosure Cooling		Convection
Installation Type		19" Rack

Mechanical---Remote Unit		
Dimensions, H x W x D	mm	510 x 350 x 103
Weight (approx.)	kg	22
Power Supply	VAC	100-240 / 50±5Hz
Power Consumption (approx.)	W	480
RF Connectors		4.3-10 Female x 1
Operating Temperature	°C	-33 to +55
Operating Humidity		≤ 95%
IP Level		IP65
Enclosure Cooling		Convection
Installation Type		Wall/ Pole