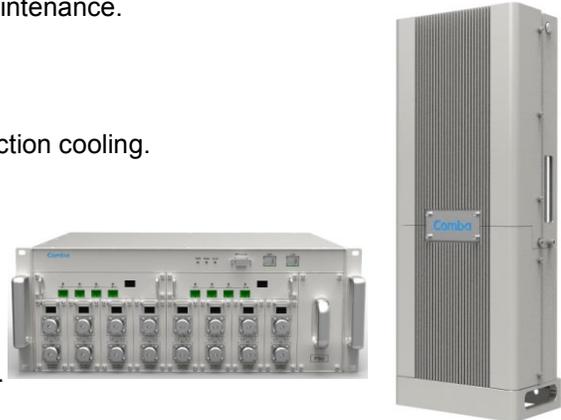


ComFlex 600 Series DAS

LRU-6800/MRU-6800 - 2W/5W ComFlex 700MHz, 800MHz, 850MHz, 1900MHz, EAWS

- Modularized Master Unit supports flexible field upgrade and maintenance.
- Independent gain control for each RF source.
- Independent coupling port for uninterrupted network testing.
- High MTBF and low noise design with modular PSU and convection cooling.
- RF module supports both simplex and duplex.
- Compact slim Remote Unit for OPEX saving.
- Supports multi-operator and mix mode application.
- Optical link auto gain control.
- Web based GUI for intelligent commissioning and configuration.

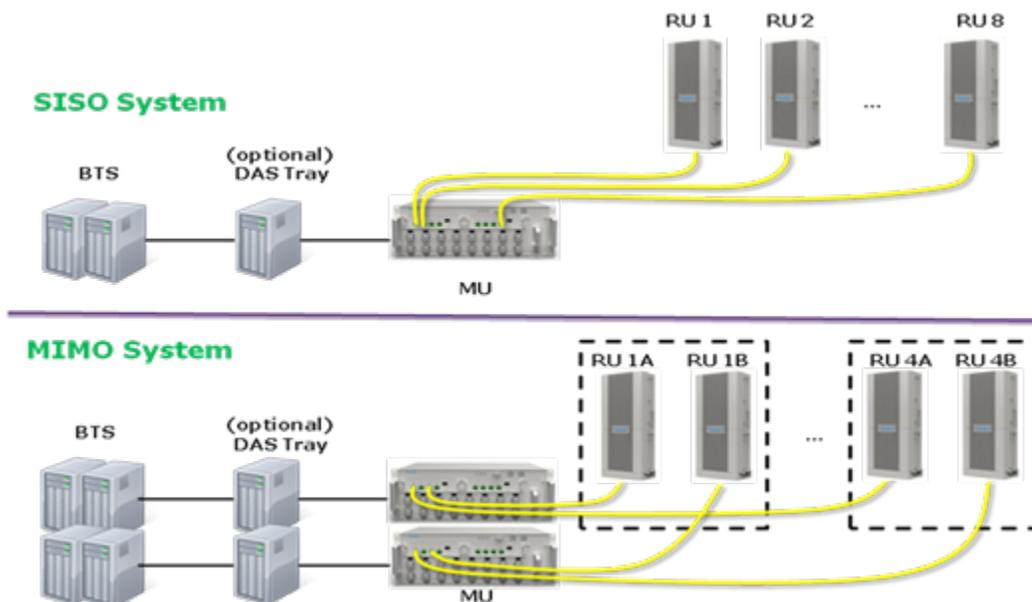


Product Description

The ComFlex 600 series Distributed Antenna System is an RF over fiber solution that enhances a wireless network’s coverage by extending cellular services from existing cell sites to an indoor environment. The system consists of the Master Unit (MU) and medium power Remote Unit (RU). The MU includes the Chassis, Power Supply Unit (PSU), Fibre Optical Unit (FOU) and RF Unit (RFU). With a modular design, it can support up to 8 independent RF inputs and 8 Remote Units. The Remote Unit is designed with a compact and slim form factor for easy installation; it is an integrated design which supports 6 independent bands, 700MHz (lower ABC), 700MHz (upper C), 800MHz, 850MHz, 1900MHz and EAWS band.

This solution is an effective point-to-multipoint distributed antenna system that provides effective coverage enhancement. The Comba Hex-Band DAS offers service providers an optimal solution for multiple applications from a single building to a campus, mega mall, or sports arena and beyond.

Functional Block Diagram



Technical Specifications

Optical Specifications		
System		700MHz (lower ABC), 700MHz (upper C), 800MHz, 850MHz, 1900MHz, EAWS
Optical Fiber		Single Mode
Optical Wavelength	nm	1310, 1550 + WDM
Optical Output Power	Master Unit	-4 – -2
	Remote Unit	3 – 5
Optical Return Loss	dB	> 50
Max. Optical Loss	dBo	6.5
Optical Automatic Gain Control	dBo	6.5
Fiber Connectors		SC/APC
Maximum Remote Unit per Master Unit		16 (with FOU extension)

Electrical Specifications			700MHz	800/850MHz	1900MHz	EAWS
Frequency Range	Uplink	MHz	698-716 / 776-787	817-824 / 824-849	1850 – 1915	1710 – 1780
	Downlink		728-746 / 746-757	862-869 / 869-894	1930 – 1995	2110 – 2180
Operating Bandwidth		MHz	18/11	7/25	65	70
Uplink Output Power		dBm	-25	-25	-25	-25
Downlink Output Power		dBm	37 / 33	37 / 33	37 / 33	37 / 33
Uplink Maximum Gain		dB	27 / 23			
Downlink Maximum Gain		dB	27 / 23			
ATT Adjustable Range		dB	MU: 0 – 40, RU: 0 – 30			
Pass Band Ripple (p-p)		dB	≤ 4	≤ 6	≤ 6	≤ 4
Spurious Emission			3GPP TS 36.106 FCC	3GPP TS 36.106 FCC	3GPP TS 25.106 FCC	3GPP TS 25.106 3GPP TS 36.106 FCC
Uplink Noise Figure at Maximum Gain		dB	≤ 6			
System Delay		μsec	≤ 3			
VSWR			≤ 1.5			
Max. Input RF Power at Master Unit		dBm	30			

Mechanical Specifications--MU			
Dimensions, H x W x D	Chassis	in(mm)	7" x 19" x 15.7" (178 x 482 x 400)
	Fiber Optical Unit		1.5" x 7.3" x 11.8" (37 x 185 x 299)
	RF Unit		4.1" x 1.8" x 10.2" (103 x 46 x 259)
	Power Supply Unit		5.5" x 2.5" x 15.7" (140 x 63 x 400)
Weight (approx.)	Chassis	lb(kg)	24.3 (11)
	Fiber Optical Unit		4.4 (2)
	RF Unit		2.2 (1)
	Power Supply Unit		5.5 (2.5)
Power Supply		VAC	100 – 240 / 50 – 60Hz
Power Consumption (approx.)		W	85
RF Connectors			4.3-10 – Female
Coupling Port Connectors			QMA – Female (For UL related testing, coupling value: -5dB)
Fiber Connectors			SC/APC
Operating Temperature		°C	0 – 40
Operating Humidity		%	≤ 85
Ingress Protection			IP30
Enclosure Cooling			Convection
Installation Type			19" Rack

Mechanical Specifications--RU			
Dimensions, H x W x D	Remote Unit	in(mm)	26.0" x 9.8" x 6.3" (660 x 250 x 160)
	Power Supply Unit		16.1" x 4.4" x 3.5" (408 x 111 x 90)
Weight (approx.)	Remote Unit	lb(kg)	55.1 (25)
	Power Supply Unit		7.7 (3.5)
Power Supply	VAC		100 – 240 / 50 – 60Hz
Power Consumption (approx.)	W		200 (5W), 185 (2W)
RF Connectors			4.3-10 – Female
Coupling Port Connectors			QMA – Female (For DL related testing, coupling value: -45dB:700&850&800; -35dB: 1900&AWS)
RF Expansion Port			QMA – Female (1 x TX_EXT + 1 x RX_EXT)
Fiber Connectors			SC/APC
Operating Temperature	°C		-20 - 50
Operating Humidity	%		≤ 85
Ingress Protection			IP30
Enclosure Cooling			Convection
Installation Type			Wall and Pole

Ordering Information

	Module Name	P/N
Master Unit	Master Unit V2 Chassis	MU01-RACK-E02
	Master Unit V2 Power Supply Unit	MU01-PSU-A92E01
	Master Unit Fiber Optical Unit	MU01-FOU-SABFOP6
	Master Unit V2 FOU Expansion Rack	MU01-FOURK-E01
	Master Unit V2 RFU Dummy Load	MU01-RFU-LD
	Master Unit V2 FOU Dummy Load	MU01-FOU-LD
	Master Unit RF Unit (700MHz Lower ABC)	MU01-RFU-7LB181Q
	Master Unit RF Unit (700MHz Upper C)	MU01-RFU-7UB11Q
	Master Unit RF Unit (800MHz ESMR)	MU01-RFU-80B18Q
	Master Unit RF Unit (850MHz)	MU01-RFU-85B25Q
	Master Unit RF Unit (1900MHz)	MU01-RFU-19B65Q
	Master Unit RF Unit (EAWS)	MU01-RFU-EAWSB70Q
Remote Unit	Low Power Remote Unit (700+800/850+1900+EAWS) 2W	LRU01-6800QP06Q
	Medium Power Remote Unit (700+800/850+1900+EAWS) 5W	MRU01-6800QP04Q
	Remote Unit Power Supply Unit	LRU01-PSU-A92W300