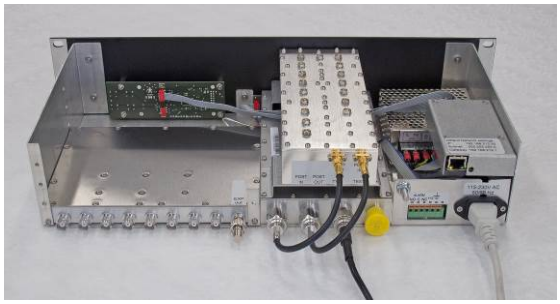
Tower Top Amplifier System

The Combilent Tower Top Amplifier (TTA) system the TTA and Receiver Multicoupler (RMC). Redundant quadrature coupled low noise amplifiers delivers high reliability and the TTA form factor sets new standards in size and weight. Features include:

- System includes TTA and the Receiver Multi-Coupler (RMC)
- Redundant high performance redundant quadrature-coupled low noise amplifier (LNA)
- 110dB isolation in 700 MHz and 800 MHz Tx-bands
- Compact, lightweight TTA form factor with integrated surge protection
- RMC includes power supply and alarm interface to BTS base station and signaling interface to the TTA
- Application is for compensating imbalance between up-link and down-link when the cable loss exceeds 1.5dB
- DC back-up (+12V) connection integrated in RMC

TTA

RMC (front view)



RMC (back view)

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System Specification	Part Numbers AC power supply	Part Numbers DC power supply	Description
The TTA system is designed for 18dB system gain with a 4dB feeder loss, and is capable of up to 25 dB of gain if the feeder loss is less than 4dB	CP00759	CP00759	TTA 799 – 817 MHz
	CP00760	CP00760	TTA 806 - 824 MHz
	CP00978	CP00979	RMC 18 MHz BW
	CP01102	CP01102	Field 8-port expansion 793-824 MHz
	CP11151	CP11151	Factory 8-port expansion 793-824 MHz

TTA / RMC system

Frequency	799 – 817 MHz 806 – 824 MHz
Selectivity	>110 dB above 851 MHz >110 dB below 776 MHz
Gain	25 dB (@ 4dB feeder)
Noise figure	< 2.2 dB (@ 4dB feeder)

Specification	TTA
Frequency	According to table above
Gain	25 dB
Noise figure	< 2 dB
Integrated test port	40 dB coupler
IIP3	+15 dBm
Return loss, all ports	17 dB min
Surge protection, all ports	8x20 µs, 20kA 10x350 µs, 3kA
Operating temp.	-30°C to +60°C
Enclosure	IPX5
Connectors, all ports	N-female
Dimensions	9.5” x 4” x 4”
Weight	8 lbs
Outline drawing	OD17460

Specification	RMC including filter
Frequency	According to table above
Gain	4 dB (RES/DIS gain settings = 0)
Reserve gain att.	0 to -15 dB in 1 dB steps
Distribution att.	0 to -15 dB in 1 dB steps
Noise figure	6 dB (at max gain)
OIP3	+24 dBm (at max gain)
Outputs	8 + 1 high gain expansion port
Outputs	BNC female
Test port (front)	BNC female
Test cable (rear)	N female
TTA connector	N female
Return loss	17 dB min (all RF ports)
Alarm	Form C contact / Ethernet
Control	Display, web server, SNMP
Power supply AC	90 to 230V AC, 25W
Power supply DC	-36 to -72V DC, 25W
DC back-up	+12V, 3A
Operating temp.	-10°C to 60°C
Dimensions	19”, 2U, 8” deep
Weight	12 lbs
Test modes	LNA bypass LNA input to 50 ohm load
Outline drawing	OD17798

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