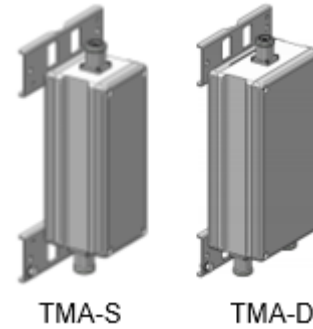


BENEFITS

- **Very compact**
- **TMA-S (receive only)**
- **TMA-D (includes duplexer)**


DESCRIPTION

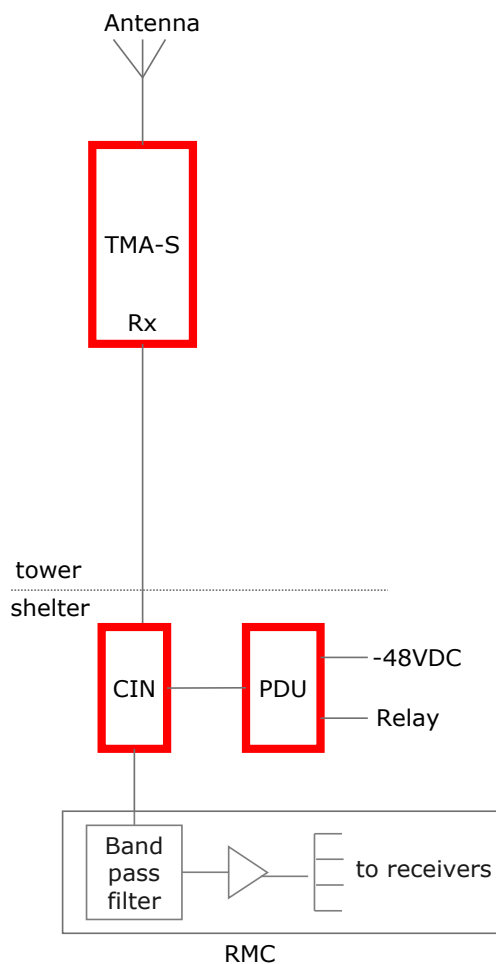
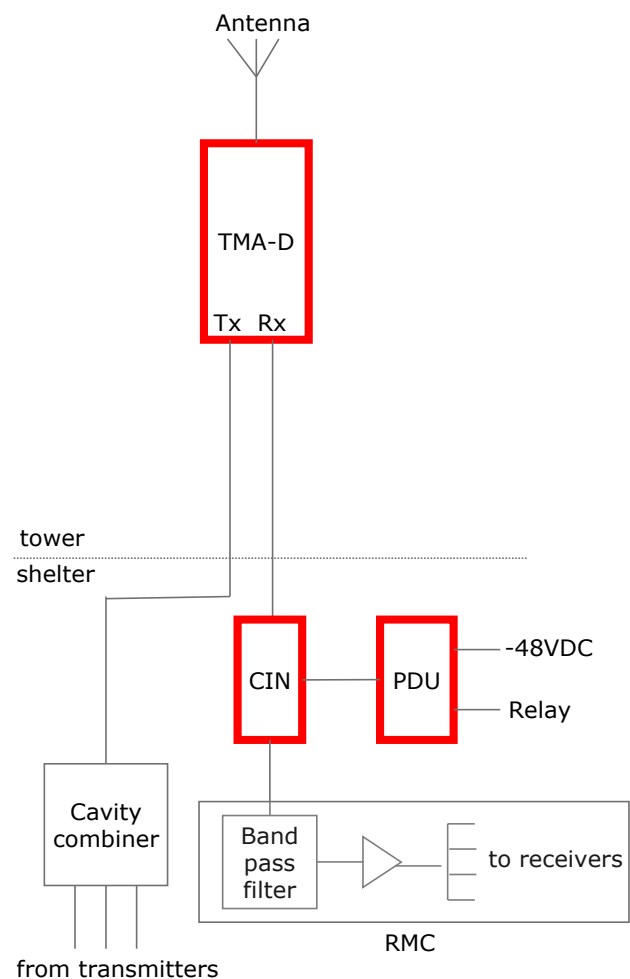
The TMA-system from Combilent is very compact and designed to work with base stations equipped cavity combiners (TMA-D) improving the coverage by compensating the link balance and feeder cable losses.

The system includes TMA-S (receive only), TMA-D (including duplexer), Current Injector (CIN) and Power Distribution Unit (PDU)

The TMA includes by-pass mode in case of no DC power or amplifier failure.

The PDU monitors the status of the TMA and provides alarm to the base station.

A post-filter/Rx-divider (RMC) must be used with the TMA-system depending on antenna isolation.


TMA-S system schematic

TMA-D system schematic

PART NUMBERS

Product description	Part number
TMA-S, 380-385 MHz	CP00702
TMA-S, 385-390 MHz	CP00707
TMA-S, 407.5-410 MHz	CP00730
TMA-S, 407-412 MHz	CP00718
TMA-S, 410-415 MHz	CP00708
TMA-S, 415-420 MHz	CP00709
TMA-S, 427.5-430 MHz	CP00719
TMA-S, 450-455 MHz	CP00706
TMA-S, 455-457.5 MHz	CP00749
TMA-S, 455-460 MHz	CP00703
TMA-S, 457.5-460 MHz	CP00723
TMA-S, 465-467.5 MHz	CP00750
TMA-S, 467.5-470 MHz	CP00751
TMA-S, 478.3-483.3 MHz	CP00725
TMA-S, 495-500 MHz	CP00724
TMA-S, 806-824 MHz	CP00735
TMA-S, 799-824 MHz	CP00710
TMA-D, Rx 380-385 MHz / Tx 390-395 MHz	CP00701
TMA-D, Rx 385-390 MHz / Tx 395-400 MHz	CP00712
TMA-D, Rx 408-413 MHz / Tx 418-423 MHz	CP00731
TMA-D, Rx 410-415 MHz / Tx 420-425 MHz	CP00713
TMA-D, Rx 415-420 MHz / Tx 425-430 MHz	CP00714
TMA-D, Rx 450-455 MHz / Tx 460-465 MHz	CP00706
TMA-D, Rx 455-460 MHz / Tx 465-470 MHz	CP00716
TMA-D, Rx 478.3-483.3 MHz / Tx 468.3-473.3 MHz	CP00726
TMA-D, Rx 806-824 MHz / Tx 851-869 MHz	CP00717
PDU for two TMAs	CP00901
PDU for six TMAs	CP00900
Current Injector (CIN) 300-1000 MHz	CP00800

PERFORMANCE CHARACTERISTICS

Specifications apply across the operating temperature range and frequency band unless otherwise stated.

Parameter	Specification
Frequency	According to table above. Other bands on request.
Tx insertion loss	<1.3 dB TMA-D, UHF 5 MHz BW <2.3 dB TMA-D, UHF 2.5 MHz BW <1 dB TMA-D, 7/800 MHz
Tx selectivity in Rx-band	>65 dB TMA-D
Tx power handling	8*43 dBm TETRA carriers TMA-D
Rx-gain	12 dB
Rx noise figure	<2.2 dB TMA-S, TMA-D, UHF 5 MHz BW <3 dB TMA-S, UHF 2.5 MHz BW <2.0 dB TMA-S, TMA-D, 7/800 MHz
Rx IIP3	>+5 dBm
Rx selectivity in Tx-band	>65 dB TMA-D >60 dB TMA-S
By-pass loss	<2.5 dB
Return loss, all ports	>18 dB
Power supply	-48 VDC (to PDU) TMA is +12VDC, 200 mA
Operating temperature range	-10°C to +65°C for PDU, CIN -30°C to +65°C for TMA
Connectors, TMA	Tx, Rx, ANT: 7-16 female
Connectors, CIN	TMA side: 7-16 female, BTS side: 7-16 male
Dimensions and weight	TMA-S: 100*245*100 mm. 4 kg TMA-D: 160*285*100 mm, 6 kg PDU: 19", 1U, 105 mm, 1 kg CIN: Ø52*114 mm. 430 g
MTBF (2*TMA, 2*CIN, PDU)	468.750 hours
Outline drawings	TMA-S: OD12236 TMA-D: OD12235 PDU (x2): OD12333; PDU (x6): OD13195 CIN: OD10427