

# TTA-UM0001

## UMTS2100 Full Band, Dual Duplex, Twin TMA

- Small, low weight, twin unit
- Full band UMTS2100
- Improved base station sensitivity
- High linearity
- Lightning protected
- Fail-safe bypass mode
- Ideal for X-Pol systems
- AISG compatible / Current Dump compatible



### TECHNICAL CHARACTERISTICS

#### Downlink (TX) Path

Frequency Band	2110 – 2170 MHz
Insertion Loss	0.35 dB typ.
Return Loss, all ports	18 dB min (VSWR <1.3)
Group Delay Variation	5 ns max
Absolute Group Delay	20 ns max
Continuous Average Power	200 W max.
Peak Envelope Power	1100 W max (at sea level)
Intermodulation, 2x 43 dBm Tx Carriers, BTS port	-120 dBm max. in Rx band, ANT port

#### Uplink (RX) Path

Frequency Band	1920 – 1980 MHz
Gain	12 dB nominal
Gain Ripple	± 0.3 dB max.
Group Delay Variation	25 ns max
Absolute Group Delay	60 ns max
Noise Figure	1.6 dB typ.
Return Loss, normal mode, all ports	18 dB min (VSWR <1.3)
Insertion Loss, Bypass mode	1.8 dB typ.
Return Loss, Bypass mode, all ports	14 dB min (VSWR <1.5)
Output Intercept Point	+28 dBm min.
Maximum Input Power with no damage	+12 dBm

#### Rejection

1 – 1880 MHz	90 dB min
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#### Power Supply and Alarm

DC Supply Voltage via BTS-RF cable	+9 to +15 V DC
DC inrush current (at switch-on)	350 mA max per port

#### Current Alarm mode

DC supply current port BTS0	125 ± 15 mA at 12V DC
DC supply current port BTS1	125 ± 15 mA at 12V DC
DC supply current, alarm mode, per port	225 ± 25 mA at 12V DC (per LNA) consult us for Node B compatibility

#### AISG mode

DC supply current, total	The AISG port is BTS0 340 mA typ.
AISG connector current rating	< 4 Amp, pin 6

#### Environmental

Maximum Operating Temperature Range	-40 to +65 °C
Environmental Sealing - Housing	IP65 Ventilated
Environmental Sealing - Connectors	IP67
Lightning Protection	±10 kA, 8/20 µs max. shield to body, to IEC61000-4-5 ±3 kA, 8/20 µs max. centre pin to body, to IEC61000-4-5
MTBF	>700,000 hours

#### Mechanical

<sup>1</sup> Dimensions	236 (H) x 168 (W) x 49 (D) mm
Weight	4.0 kg max
Connectors	DIN 7-16 (F) x 4 long shank
Mounting	Vertical, Pole / Wall

<sup>1</sup> Excluding connectors, and mounting bracket extension

