



*This photo is showing MI-16506

General Description

Microdata Telecom's TMA provides network operators with a cost effective solution that delivers up to 50% improvement in uplink throughput while reducing dropped connections up to 20%.

The lower interference achieved with Microdata Telecom TMA shifts the traffic to higher coding schemes which further improves network performance and capacity.

The PIM buffer effect of Microdata Telecom TMAs will enable profitable use of spectrum previously avoided due to PIM contamination.

Features & Benefits

- Active LNA on all bands
- Market leading PIM performance (-160 dBc across the product portfolio)
- Efficiently prepare your sites for future expansions
- Fully utilize the capabilities of your ultra-wideband antennas
- Diplexed BTS Port that enable antenna and feeder sharing
- Small and light for minimum visual impact
- Reduce tower loading with up to 75%
- Full AISG operation and RET (Remote Electrical Tilt) antenna support

Specifications

| Downlink (TX) Path | 800 | 900 |
|---|--|-------------------------------|
| Frequency Band | 791 - 821 MHz | 925 - 960 MHz |
| Insertion Loss | 0.4 dB* | 0.4 dB* |
| Return Loss | ≥ 18 dB | ≥ 18 dB |
| Continuous Average Power | 200 W (53 dBm) | 200 W (53 dBm) |
| Intermodulation, 2x43 dBm TX Carrier BTS port | -116 dBm in RX band, ANT port | -116 dBm in RX band, ANT port |
| Uplink (RX) Path | | |
| Frequency Band | 832 - 862 MHz | 880 -915 MHz |
| Gain | 12 dB nominal | 12 dB nominal |
| Return Loss | ≥ 16 dB | ≥ 16 dB |
| Noise Figure | 1.1 dB* | 1.1 dB* |
| Insertion Loss, Bypass mode | 1.7 dB* | 1.7 dB* |
| Return Loss | ≥ 12 dB | ≥ 12 dB |
| Output IP3 | >25 dBm | >25 dBm |
| Power Supply and Alarm | Current Alarm Mode | AISG - Mode |
| DC | 9 - 15 V | 24 V DC nominal (9-31 V DC) |
| Power | <165 mA @12V | < 4 W |
| Alarm | Factory config. max 320 mA | 3GPP/AISG 2.0 or AISG 1.1 |
| Environmental | | |
| Operating Temperature Range | -40 to +65°C -40 to +149°F | |
| Operation | ETS 300 019-1-4, Class 4.1E | |
| Storage | ETS 300 019-1-1, Class 1.2 | |
| Ingress Protection | IP67 | |
| Miscellaneous | | |
| EMC | EN 301 489-8 | |
| Safety standards | EN 60950 | |
| MTBF | 1 Mh/TMA min. | |
| Mechanical | | |
| Dimensions (WxHxD) | 230X245X155 mm 9.06x9.65x6.10 in | |
| Connectors (See Selection Guide) | 4x ANT, 2x BTS, AISG Female 8 pin circular | |
| Mounting (Supporter Pole Diameter: 40-140mm) | Hose clamps, arbitrary orientation | |
| Volume | 8.7 l | |
| Weight | 12.0 kg 26.46 lb | |
| Colour | NCS 1502-R | |
| Bracket | Included | |
| * typical | | |

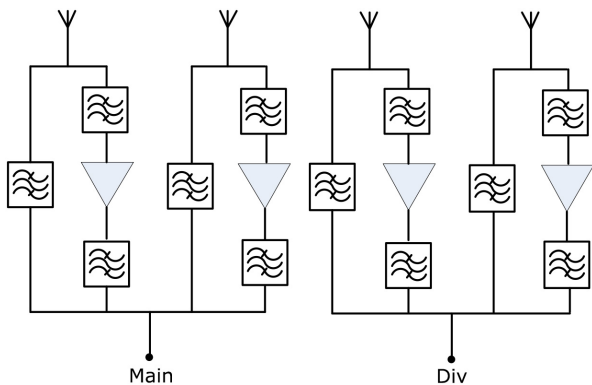
Selection Guide

| Model number | AISG | | Connector (F) | | |
|--------------|-------------|---------------------|---------------|--------|------|
| | Common Mode | Independent | 7/16 | 4.3-10 | AISG |
| MI-16501 | X | ONETWO ¹ | X | | 1x |
| MI-16502 | X | TWOTWO ² | X | | 1x |
| MI-16506 | | | X | X | 2x |
| MI-16531 | X | ONETWO ¹ | | X | 1x |
| MI-16532 | X | TWOTWO ² | | X | 1x |
| MI-16536 | | | X | X | 2x |

¹ONETWO: the TMA is identified as 1 logic unit with 2 subunits

²TWOTWO: the TMA is identified as 2 logic units with 2 subunits each

Block Diagram



Mechanical Drawing

*This picture is showing MI-12756

