



# MI-2850n Same Band Combiner 900

The MI-2850n family of combiner products, include:

- **MI-28501**, DC/AISG on Common – Port 1 & Port 2
- **MI-28502**, DC/AISG on Common – Port 1
- **MI-28503**, DC/AISG on Common – Port 2
- **MI-28504**, no DC/AISG transparency

## MASS™

### Microdata Advanced Site Solutions

With our expertise in site system design we are able to provide a solution for any site sharing or upgrade scenario.

Our focus area is RF-filter based solutions including combiners, multi band TMAs, di-, tri- and quadruplexers.

Our product portfolio supports all frequencies for mobile communication bands ranging from 450 MHz to 6 GHz.

Site and network sharing makes it cost efficient to reach sparsely populated areas where new subscribers can contribute to revenue.

## MASS™

### Advantage

#### Increases coverage

more traffic & higher ARPU

#### Increases capacity

more traffic & higher ARPU

#### Reduces the cost

of network expansion

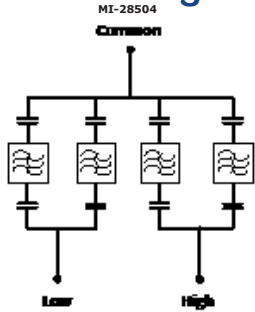
#### Minimizes

site acquisition issues

## Specifications

| 900 Same Band Combiner, AISG and DC Transparency           |                               |                   |                |
|--|-------------------------------|-------------------|----------------|
| <b>Uplink (Rx)</b>   |                               |                   |                |
| Frequency Band MHz   | Port 1                        | Port 2            |                |
| 890.2 - 894.6  | 890.2 - 894.6                 | 905.0 - 914.8     |                |
| IL dB (typ/max.) OBW                                       | 0.4 / 0.5                     | 0.5 / 0.6         |                |
| <b>Downlink (Tx)</b>                                       |                               |                   |                |
| Nominal Frequency Band                                     | Port 1                        | Port 2            |                |
| 935.2 - 939.6 MHz  | 935.2 - 939.6 MHz             | 950.0 - 959.8 MHz |                |
| IL dB (typ/max.) OBW                                       | 0.4 / 0.6                     | 0.3 / 0.5         |                |
| Intermodulation, 2x43 dBm TX Carrier BTS port -160 dBc     |                               |                   |                |
| Power Handling, Average 200W (53 dBm), Peak 500 W (57 dBm) |                               |                   |                |
| <b>All Bands</b>   |                               |                   |                |
| VSWR   | < 1.25                        |                   |                |
| Isolation between BTS ports                                |                               | @ Rx frequency    | @ Tx frequency |
|  |                               | 30 dB             | 30 dB          |
| <b>Power Supply</b>  |                               |                   |                |
| AISG Signal Attenuation                                    | < 1 dB @ 2.176 MHz            |                   |                |
| Voltage Drop   | 1 V max. @ 10 - 30 VDC        |                   |                |
| Supply Voltage Handling                                    | 0 - 32VDC                     |                   |                |
| Continuous Current Handling                                | 5A, 0 - 32 VDC                |                   |                |
| AISG / DC Transparency between ports                       | TBD                           |                   |                |
| <b>Environmental</b>                                       |                               |                   |                |
| Operating Temperature Range °C                             | -25 to +85°C                  |                   |                |
| Operation  | ETS 300 019-1-4 Class 4.1E    |                   |                |
| Storage  | ETS 300 019-1-1 Class 1.2     |                   |                |
| Ingress Protection   | IP67                          |                   |                |
| <b>Miscellaneous</b>                                       |                               |                   |                |
| EMC  | EN 301 489-8                  |                   |                |
| Safety standards   | EN 60950                      |                   |                |
| MTBF   | 1.5 M hours                   |                   |                |
| Lightning Protection                                       | 3 kA 10/350 µs, 10 kA 8/20 µs |                   |                |
| <b>Mechanical</b>  |                               |                   |                |
| Dimensions (WxHxD)   | 214x164x62 mm ex connectors   |                   |                |
| Connectors   | 7/16                          |                   |                |
| Volume   | 2.2 l                         |                   |                |
| Weight   | 4.0 kg                        |                   |                |
| Colour   | NCS S1502-R                   |                   |                |
| values are subject to change without notice                |                               |                   |                |

### Block Diagram



### Mechanical Drawing

