



# MI-288nn Diplexer 800/900 E-GSM



\*This photo is showing MI-2880n

The MI-288nn family of cavity diplexer products, include:

- **MI-288nA**, diplexer with DC/AISG Auto-Sense
- **MI-288n1**, diplexer with all ports DC grounded
- **MI-288n2**, diplexer with DC/AISG on Common – High & Low Band
- **MI-288n3**, diplexer with DC/AISG on Common - High Band, Low port DC grounded
- **MI-288n4**, diplexer with DC/AISG on Common - Low Band, High port DC grounded

## 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

| Low band                             |  |                                      |
|--------------------------------------|--|--------------------------------------|
| Frequency Band                       | 791 - 862 MHz  |                                      |
| Insertion Loss                       | 0.2 dB*, 0.4 dB max.   |                                      |
| Return Loss                          | >18 dB   |                                      |
| Rejection 925- 960 MHz               | >50 dB   |                                      |
| Continuous Average Power             | 400 W  |                                      |
| Intermodulation, 2x43 dBm TX Carrier | -117 dBm   |                                      |
| High Band                            |  |                                      |
| Frequency Band                       | 880 - 960 MHz  |                                      |
| Insertion Loss                       | 0.2 dB*, 0.4 dB max.   |                                      |
| Return Loss                          | >18 dB   |                                      |
| Rejection 791 - 821 MHz              | >50 dB   |                                      |
| Continuous Average Power             | 300 W  |                                      |
| Intermodulation, 2x43 dBm TX Carrier | -117 dBm   |                                      |
| 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 1.2  |                                      |
| Ingress Protection                   | IP68   |                                      |
| Electrical                           |  | With Auto-Sense                      |
| DC By Pass                           | 3 A  | 2A, drop max 2.4V                    |
| AISG pass                            | Yes  |                                      |
| AISG RL                              |  | >12dB                                |
| AISG Loss                            |  | < 1 dB                               |
| Lightning Protection                 |  | 10 kA 8/20 μs                        |
| Input Voltage Power                  |  | 8-31 V max 0.3 W                     |
| Mechanical                           |  | Single Mount   Dual Mount            |
| Dimensions (WxHxD)                   | 161x125x57 mm<br>6.33x4.92x2.24 in                           | 161x125x121 mm<br>6.33x4.92x4.76 in  |
|                                      | With Auto-Sense<br>161x125x68 mm<br>6.33x4.92x2.68 in        | 161x125x146 mm<br>6.33x4.92x5.75 in  |
| Volume                               | 1.1 l  | 2.4 l                                |
| With Auto-Sense                      | 1.4 l  | 2.9 l                                |
| Weight gross/net                     | 2.3kg / 1.8kg   5.07lb / 3.97lb                              | 4.1kg / 3.6kg   9.04lb / 7.94lb      |
| With Auto-Sense                      | 2.4kg / 1.9kg   5.29lb / 4.19lb                              | To be added                          |
| Connectors                           | See Selection Guide  |                                      |
| Mounting                             | Hose clamps or wall mount. Supporter Pole Diameter: 40-140mm |                                      |
| Colour                               | NCS 1502-R   |                                      |
| Bracket                              | Included   |                                      |
| Shipping Information                 |  | Single Mount   Dual Mount            |
| Carton Size                          | 250x220x140 mm<br>9.84x8.66x5.51 in                          | 260x240x203 mm<br>10.24x9.45x7.99 in |
|                                      | Carton Qty/Pallet  | 72                                   |

\* Typical

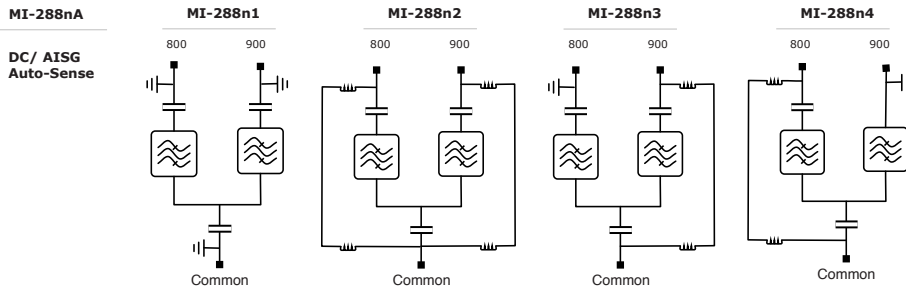
## Selection Guide

|       |        | Connector (F) |          |
|-------|--------|---------------|----------|
|       |        | 7/16          | 4.3-10   |
| Mount | Single | MI-2880n      | MI-2883n |
|       | Dual   | MI-2881n      | MI-2884n |

\*The dual filter configuration is mounted on a single bracket for hose clamp or wall mount.

### Block Diagram

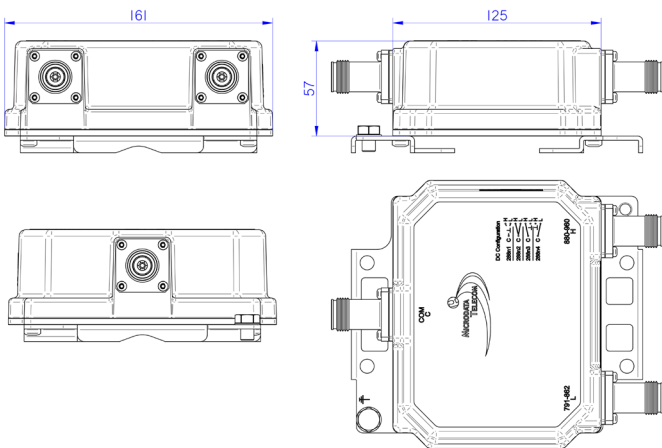
### DC/AISG



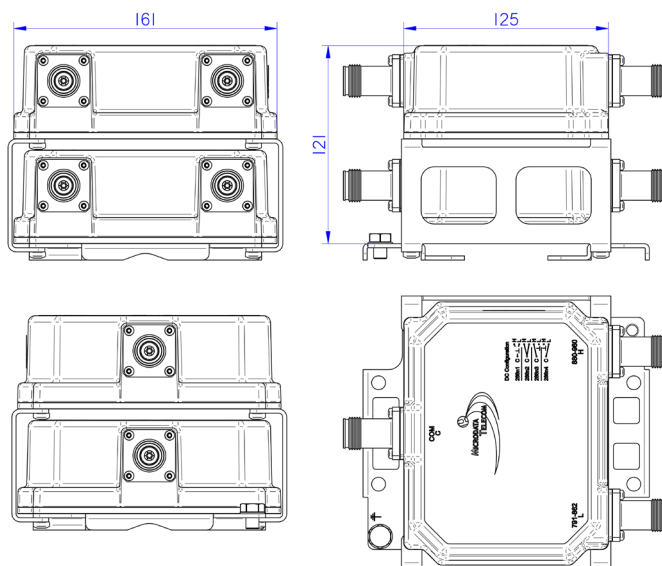
|                 | 800        | 900   |
|-----------------|------------|-------|
| <b>MI-288nA</b> | Auto-Sense |       |
| <b>MI-288n1</b> | Block      | Block |
| <b>MI-288n2</b> | Pass       | Pass  |
| <b>MI-288n3</b> | Block      | Pass  |
| <b>MI-288n4</b> | Pass       | Block |

### Mechanical Drawing

\*This picture is showing MI-2883n



\*This picture is showing MI-2884n



\*This picture is showing MI-2881A

