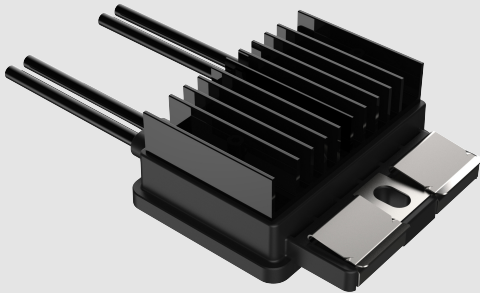




ENTELLIGENT



## Entelligent NMax RSD with Optimization



Entelligent NMax M900A1  
Single Input



Entelligent NMax M900A2  
Dual Input

## PV Module-Level Monitoring Capable<sup>1</sup>

- Adaptive optimization technology - microprocessor control
- Industry-leading pass-through efficiency (99.8%) in full sun
- Maximum PV module level MPPT power optimization in shade
- 2017 NEC 690.12 and 2020 NEC 690.12 Rapid Shutdown compliant
- Effortless plug and play installation; no finicky network setup required
- Advanced solid-state architecture with 30% fewer components
- Less heat generation means higher reliability, greater longevity and fewer service calls
- PV module-level monitoring<sup>1</sup> for installation validation, service troubleshooting & performance tracking

<sup>1</sup> when installed with an Entelligent NMax RSS Transmitter

# Enteligent NMax RSD with Optimization

## Product Specifications

| Enteligent NMax MPLE Model Number<br>Number of Inputs                                                | M900A1<br>Single Input                                                                                                                | M900A2<br>Dual Input                                                  | M900B1<br>Single Input                                                           | M500A1<br>Single Input                   |
|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------|
| Electrical                                                                                           |                                                                                                                                       |                                                                       |                                                                                  |                                          |
| Maximum Input Voltage                                                                                | 80 V                                                                                                                                  | 80 V per input                                                        | 100 V <sup>1</sup>                                                               | 60 V                                     |
| Maximum Output Voltage                                                                               | 80 V                                                                                                                                  | 160 V                                                                 | 100 V <sup>1</sup>                                                               | 60 V                                     |
| Maximum Current                                                                                      | 12.5 A                                                                                                                                | 12.5 A                                                                | 14 A                                                                             | 14 A                                     |
| Maximum Power                                                                                        | 900 W                                                                                                                                 | 900 W<br>( 450 W per input )                                          | 900 W                                                                            | 500 W                                    |
| Maximum Power Consumption                                                                            | 1.8 W                                                                                                                                 | 0.9 W per input                                                       | 2.2 W                                                                            | 0.8 W                                    |
| Mechanical                                                                                           |                                                                                                                                       |                                                                       |                                                                                  |                                          |
| Dimensions (without cable)                                                                           | 112 x 118 x 46 mm                                                                                                                     | 112 x 130 x 41 mm                                                     | 112 x 118 x 46 mm                                                                | 112 x 118 x 35 mm                        |
| Weight                                                                                               | 700 g                                                                                                                                 | 750 g                                                                 | 700 g                                                                            | 550 g                                    |
| Cable Length                                                                                         | Input Cable: 0.12 m<br>Output Cable: 1 m                                                                                              | Input 1 Cable: 0.12 m<br>Input 2 Cable: 0.24 m<br>Output Cable: 1.2 m | Input Cable: 0.12 m<br>Output Cable: 1 m                                         | Input Cable: 0.12 m<br>Output Cable: 1 m |
| Cable                                                                                                | 12 AWG                                                                                                                                |                                                                       |                                                                                  |                                          |
| Enclosure Rating                                                                                     | NEMA Type 6P / IP 68                                                                                                                  |                                                                       |                                                                                  |                                          |
| Features                                                                                             |                                                                                                                                       |                                                                       |                                                                                  |                                          |
| PV Module-Monitoring <sup>2</sup> :<br><br>MLPE data communicated to Enteligent NMax RSS Transmitter | Voltage Input<br>Voltage Output<br>Serial Number<br>Status Errors<br>Operational Mode ( Passthrough / Power Optimization / Stand-By ) |                                                                       | Current Input<br>Current Output<br>Firmware Version<br>MPLE Internal Temperature |                                          |
| Power Optimization                                                                                   | Yes ( MPPT )                                                                                                                          |                                                                       |                                                                                  |                                          |
| Communication Signal                                                                                 | Power Line Communication ( PLC )                                                                                                      |                                                                       |                                                                                  |                                          |
| Operating Ambient Temperature Range                                                                  | -40°C to +85°C ( -40°F to +185°F )                                                                                                    |                                                                       |                                                                                  |                                          |
| Maximum Number of NMax MLPEs per PV String <sup>1</sup>                                              | 30                                                                                                                                    | 30                                                                    | 30                                                                               | 30                                       |
| Maximum Number of PV Modules per NMax MLPE <sup>1</sup>                                              | 2                                                                                                                                     | 2                                                                     | 2                                                                                | 1                                        |
| Over-Temperature Protection                                                                          | Yes                                                                                                                                   | Yes                                                                   | Yes                                                                              | Yes                                      |
| Standards Compliance                                                                                 |                                                                                                                                       |                                                                       |                                                                                  |                                          |
| Photovoltaic Rapid Shutdown System                                                                   | NEC 2017 (690.12), NEC 2020 (690.12)                                                                                                  |                                                                       |                                                                                  |                                          |
| Safety Compliance                                                                                    | UL 1741, CSA 22.2 No. 107.1                                                                                                           |                                                                       |                                                                                  |                                          |
| EMC Compliance                                                                                       | FCC Part 15 Class B; IEC 61000-6-2; IEC 61000-6-3                                                                                     |                                                                       |                                                                                  |                                          |
| Others                                                                                               | SunSpec™ RSD Certified                                                                                                                |                                                                       |                                                                                  |                                          |
| Model Number by Connector Type                                                                       |                                                                                                                                       |                                                                       |                                                                                  |                                          |
| Staubli MC4                                                                                          | M900A1-M4                                                                                                                             | M900A2-M4                                                             | M900B1-M4                                                                        | M500A1-M4                                |
| MC4 Compatible ( BizLink S418 )                                                                      | M900A1-S4                                                                                                                             | M900A2-S4                                                             | M900B1-S4                                                                        | M500A1-S4                                |

<sup>1</sup> subject to applicable standards compliance limitations

<sup>2</sup> when installed with an Enteligent NMax RSS Transmitter