# SSFM-ND SMARTSENSE® NETWORK DISPLAY

- Low power consumption, high-efficiency switch mode power supply
- Free, easy-to-use configuration software package
- The display is fully configurable through the ViewMarq software for ease of use.

## smartsense®

## FEATURES

The smartsense network display is a 4-line, tri-color, 9.5-inch maximum character size LED message display.

The SSFM-ND is a 4-line x 24 character display which supports red, amber and green characters, embedded string and numeric variables and scrolling (right, left, up and down). There are (1) RS-232 port, (1) RS-485 port and (1) 10/100 BaseT Ethernet port for configuration and external message control.

It supports serial ASCII, Modbus RTU, and Modbus TCP proto-cols.

## TECHNICAL DATA

| PERFORMANCE SPECIFICATIONS | |
|---|---|
| Type | LED matrix: Tri-color (Green, Red, Amber) |
| LED Life | 100,000 hours |
| LED Pitch | 0.19 in [5 mm] |
| LED Spacing | 0.27 in [7 mm] |
| Number of Lines | 4 (Based on 5 x 7 pixel sized characters) |
| Text Height | 1.25 in, 2 in, 4 in, 6 in, 8 in (Depends on character set selected) |
| Character Set | Printable ASCII |
| Approximate Viewing Distance | 400 ft |
| Serial Communications | Serial RS-232, RS-485 both ASCII and Modbus, 2400 – 38.4KB - Slave only |
| Ethernet Communications | Modbus TCP, 10/100 BaseT - Server only |

| AC ELECTRICAL DATA | |
|---|---|
| Input Voltage | 100-240 VAC (+10% / -15%), 50 / 60 Hz |
| Maximum Current | 2A |
| Power Cunsumption (MAX) | 123W |
| Maximum Inrush Current (Cold and Hot) | 9.5A |
| Insulation Resistance | 10 MOhms @ 500 VAC |

| DC ELECTRICAL DATA | |
|---|---|
| Input Voltage | 24 VDC (+10% / -15%) |
| Maximum Current | 4A |
| Reverse Polarity Protection | 12A |

| ENVIRONTMENTAL DATA | |
|---|---|
| Storage Temperature | –30 to +85 °C (–22 to +185 °F) |
| Operating Temperature | 0 to 60 °C (32 to +140 °F) |
| Humidity | 5 – 95% non-condensing |
| Enclosure Rating | NEMA 12 indoor only, NEMA 4 indoor only |
| Vabration | IEC 60068-2-6 (Test Fc) |
| Shock | IEC 60068-2-27 (Test Ea) |
| Noise Immunity | EN61131-2:2007 |

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Technical data are limit values.

If the product is integrated into systems or operated in combination with other devices, its permissible operating values can deviate from these limit values. Subject to technical modifications without prior notice.

Rev. F

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## MINING SYSTEMS