

# SUNMAN

# eArche®

12 v Boating , Caravan  
and Camping Applications

High-efficiency  
Customization  
Ultra-light  
Flexible  
Aesthetics

5  
YEAR

Warranty

## Electrical Characteristics

| STC                                | SMF175M-4X09U   | SMF100S-4X09U | SMF090S-4X08U |
|------------------------------------|-----------------|---------------|---------------|
| Maximum Power ( $P_{max}$ )        | 175             | 100           | 90            |
| Maximum Power Voltage ( $V_{mp}$ ) | 19.5            | 19.0          | 16.7          |
| Maximum Power Current ( $I_{mp}$ ) | 8.98            | 5.27          | 5.38          |
| Open-circuit Voltage ( $V_{oc}$ )  | 23.9            | 23.5          | 21.1          |
| Short-circuit Current ( $I_{sc}$ ) | 9.50            | 5.67          | 5.64          |
| Module Efficiency (%)              | 17.3            | 15.0          | 15.1          |
| Operating Temperature (°C)         | -40 °C to 85 °C |               |               |
| Maximum System Voltage             | 600 V DC (IEC)  |               |               |
| Maximum Series Fuse Rating         | 20 A            |               |               |
| Application Class                  | Class A         |               |               |
| Power Tolerance                    | 0/+5 W          |               |               |

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM=1.5.

## Mechanical Characteristics

| Product           | SMF175M-4X09U                                                          | SMF100S-4X09U   | SMF090S-4X08U   |
|-------------------|------------------------------------------------------------------------|-----------------|-----------------|
| Solar Cell        | Mono (6 inches)                                                        | Mono (5 inches) | Mono (5 inches) |
| No. of Cells      | 36 (4×09)                                                              | 36 (4×09)       | 32 (4×08)       |
| Module Dimensions | 1504×673×2 mm                                                          | 1219×546×2 mm   | 1092×546×2 mm   |
| Weight            | 3.0 kgs                                                                | 1.8 kgs         | 1.7 kgs         |
| Backsheet         | White                                                                  |                 |                 |
| J-box             | IP 68 rated (each j-box have one bypass diodes)                        |                 |                 |
| Output Cables     | Photovoltaic technology cable 4.0 mm <sup>2</sup> , (+)150 / (-)450 mm |                 |                 |
| Connector         | MC4 compatible                                                         |                 |                 |

[www.sunman-energy.com](http://www.sunman-energy.com)





**SUNMAN**  
SOLAR SPECIALIST

eArche applied to caravan market  
eArche applied to yacht applications  
eArche applied to RV market  
eArche applied to train



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**CAUTION:** Read installation manual before using the product.

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