# Primo 3.8-1: 3.8kW Solar Inverter by Fronius



Price: CAD \$1,999.00

SKU: FRPRIMO-3.8-1

**Product Categories**: <u>String Inverters</u>: <u>3-9kW</u>, <u>Grid-Tie</u>, <u>Inverters</u>, <u>Shop</u>

Product Tags: 208, 208v, 240, 240v, advanced, canada, data manager,

<u>datamanager</u>, <u>fronius</u>, <u>fronius inverter</u>, <u>fronius primo</u>, <u>fronius primo 7.6</u>, <u>fronius primo 7.6</u>, <u>primo 7.6</u>, <u>primo 7.6</u>, <u>primo 7.6</u>, <u>primo 100 primo 100 p</u>

string inverter

# **Product Page:**

https://www.modernoutpost.com/product/primo-3-8-1-3-8kw-solar-inverter-by-fronius/

# **Product Summary**

Looking for an affordable, reliable, grid-tie inverter for a modest solar array? Consider the Fronius Primo 3.8. The tranformerless Fronius Primo is the ideal compact single-phase inverter for residential and small-scale commercial

applications with power categories from 3.8 to 8.2 kW. In accordance with ESA rules for residential applications, the Fronius Primo can operate efficiently at a maximum input voltage of 600 V. And for increased efficiency and additional cost savings for commercial applications, the Fronius Primo can operate at the maximum input voltage of 1,000 V.

# **Product Description**

Looking for an affordable, reliable, grid-tie inverter for a modest solar array? Consider the Fronius Primo 3.8. The tranformerless Fronius Primo is the ideal compact single-phase inverter for residential and small-scale commercial applications with power categories from 3.8 to 8.2 kW. In accordance with ESA rules for residential applications, the Fronius Primo can operate efficiently at a maximum input voltage of 600 V. And for increased efficiency and additional cost savings for commercial applications, the Fronius Primo can operate at the maximum input voltage of 1,000 V.

Industry-leading features now come standard with the Fronius Primo, including: dual maximum power point tracking, arc fault protection, integrated wireless monitoring and SunSpec Modbus interfaces for seamless monitoring and datalogging via Fronius' online and mobile platform, Fronius Solar.web.

This is the 'Advanced' model, offering both Data Manager communication package and AFCI (Arc Fault) protection. The Data Manager allows WLAN connectivity, energy management, several interfaces and much more. Fronius Primo is a communicative inverter for home owners.

We no longer offer the 'Lite' model which had Arc Fault protection, but not the Data Manager functionality.

Fronius inverters are efficient and reliable and form the indispensable heart of every photovoltaic system. Power categories ranging from 1.5 to 27.0 kW guarantee suitability for virtually any system size – from a family home to a large-scale system.

### Fronius Primo 3.8-1 Technical Specifications

#### **INPUT DATA**

Number of MPPT channels: 2

Recommended PV Array Power (kWp): up to 5.7 kWp

Max. usable input current: 18.0 / 18.0 A

Max. usable input current total (MPPT1 + MPPT2) : 36 A

Max. array short circuit current (1.5 \* Imax) : 27 / 27 A

Nominal input voltage: 410 V

Operating voltage range: 80 - 1000 V

MPP Voltage Range: 250 - 800 V

Max. input voltage: 1000 V

#### **OUTPUT DATA**

Max. output power @ 240 V: 3800 VA

Max. output power @ 208 V: 3800 VA

Output configuration: 1~ NPE 208 / 240 V

Frequency range: 45 - 66 Hz

Nominal operating frequency: 60 Hz

Total harmonic distortion < 5 % 5="" %="">

Power factor range: 0.85 - 1 ind./cap.

Max. continuous output current @ 240 V: 15.8 A

Max. continuous output current @ 208 V: 18.3 A

OCPD/AC breaker size (240V) : 20 A

OCPD/AC breaker size (208V): 25 A

Max. efficiency: 95.5 %

CEC efficiency @ 240V: 97.9 %

#### **GENERAL DATA**

Dimension (width): 429 mm

Dimension (height): 627 mm

Dimension (depth): 206 mm

Weight: 21.5 kg

Protection class: NEMA 4X

Night time consumption : < 1 w 1="">

Inverter topology: Transformerless

Cooling: Variable speed fan

Elevation: 4000 m (13120 ft) with a max. input voltage of 1000 V

### Certificates and compliance...

UL 1741-2010 Second Edition (incl. UL1741 Supplement SA 2016-09 for California Rule 21 and Hawaiian Electric Code Rule 14H), UL1998 (for functions: AFCI, RCMU and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC 2017 Article 690, C22. 2 No. 107.1-16, UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 – 2013

DC connection terminals 4x DC+ and 4x DC- screw terminals for copper (solid/stranded/fine stranded) or aluminium (solid/stranded)

AC connection terminals: Screw terminals 12 - 6 AWG

Revenue Grade Metering: Optional (ANSI C12.1 accuracy)

#### PROTECTION DEVICES

DC reverse polarity protection : Yes

Anti islanding: internal; in accordance with UL 1741-2016-09, IEEE 1547-2003 and

NEC 2017

Over temperature protection: Output power derating / Active cooling

AFCI: Yes

Rapid shutdown compliant: Yes (according to NEC 2014)

Ground fault protection with isolation monitor interrupter: Yes

DC disconnect: Yes

# **INTERFACES (Refer to Data Manager Documentation)**

Wi-Fi / Ethernet LAN Wireless standard 802.1 1 b/g/n / Fronius Solar.web, SunSpec Modbus TCP, JSON

USB (A socket) Datalogging and inverter update possible via USB

2x RS422 (RJ45 socket) Fronius Solar Net

Datalogger and webserver Included

Serial RS485 SunSpec Modbus RTU

6 inputs and 4 digital I/Os Load management; signaling, multipurpose I/O

### Manuals & Downloads

<u>Fronius Primo 3.8-1 Data Sheet Fronius Primo 3.8-1 Installation Manual Fronius Primo 3.8-1 User Manual</u>

### **Product Attributes**

- Dimensions: 65 × 45 × 25 cm

- Weight: 22 kg

- Model: Advanced, Lite