F601A(B) Series

Portable Installation

Rogowski Coil
Smart Power Meter



Product Overview

The F601A(B) is designed to measure current from 10 to 1000 A or 30 to 3000 A, and voltage from 80 to 620 V. The measurement is made using Rogowski coils, which allows for universal measurement across the entire current range without the need for complex transformer selection for different current. In addition, flexible Rokowski coils are very easy to use with large, irregularly shaped conductors or in places where space is tight and handling is limited

F601A(B) can accurately measure electrical energy, current, voltage, power factor and harmonic distortion, which enables users to better manage power consumption to achieve energy saving, quality and efficiency purposes

Product Advantages

Convenient Installation

Flexible Roche coils for easy installation even in tight spaces

Good Universality

Universal current up to 1000/3000 A, no need to match different current transformers to site conditions

Integral Calibration

The meter and coils are calibrated as a whole to ensure accurate measurement

Multiple Data Output Optioins

Standard with Modbus RTU interfce output, with optional wireless 4G output, allowing for more flexible data analysis

- Wide measuring range: current from 10 to 1000 A or 30 to 3000 A, and voltage from 80 to 620 V
- Suitable for both online and portable measurements
- Easy to install with simple operation, no need to consider complex transformer selection
- Flexible Rogowski coils are compact and versatile, by using insulated gloves live installation of equipment without power interruption is realizable
- Fully isolated electrical structure, completely filtering out field disturbances
- Multi data output options available: standard with Modbus RTU, and optionally wireless 4G output. This enables more flexible remote and data analysis
- With harmonic distortion analysis to analyze power quality
- Easy-to-use, powerful HMI with 2.0" TFT color LCD display

Technical Data

Measuring Range	
Voltage Input	80 ~ 620 VAC (P-P)
Current Input	10 ~ 1000 A (F601x) 30 ~ 3000 A (F601x-H)
Frequency Range	45 ~ 65 Hz

Output	
Digital Output (Standard)	Modbus RTU (RS485)
Wireless Output (Option)	IoT-4G / Wi-SUN Comm.

Accuracy	
Voltage Accuracy	0.2%
Current Accuracy	0.5% (10~1000 A, Accuracy not guaranteed below 10 A)
Power Factor Accuracy	±0.005
Active Power	IEC62053-22 Class 0.2
Active Energy	IEC62053-22 Class 0.2S

Operating Environment	
Operating Temperature	-25 ... +55 °C
Storage Temperature	-40 ... +85 °C
Humidity	5 ... 95 %RH @ 50 °C (Non-condensing)

Specification	
Wiring Methods	3PH3W / 3PH4W / 1PH2W / 1PH3W
Display	2.0" TFT color LCD display (F601A)
Power	85 ~ 265VAC, 5W, 45 ~ 65 Hz (F601A) 24 VDC, 3.5 W (F601B)
Installation	DIN-Rail
Optional Features	1GB SD card storage

Dimension	
Weight	212 g (F601A) 125 g (F601B) 1540 g (F601A-P) 1453 g (F601B-P)
Size	76 × 95 × 71 mm (L×W×H) (F601A) 145 × 91 × 41 mm (L×W×H) (F601B) 247.5 × 168.5 × 90 mm (L×W×H) (F601x-IoT)
Material	ABS+PC

EMC			
Electrostatic Discharge	Level IV (IEC61000-4-2)	Conductivity Resistance	Level III (IEC61000-4-6)
Radiation Immunity	Level III (IEC61000-4-3)	Magnetic Fields Immunity	0.5mT (IEC61000-4-8)
Rapid Transient Immunity	Level IV (IEC61000-4-4)	Conducted & Radiated Emissions	Class B (EN55022)
Surge Immunity	Level IV (IEC61000-4-5)		

Order Information

Model	Description
F601A	Smart Power Meter, with display, with 1kA / 50mm diameter Rogowski coil and voltage test cables, DIN-Rail installation, 85 … 265 VAC power supply
F601A-H	Smart Power Meter, with display, with 3kA / 50mm diameter Rogowski coil and voltage test cables, DIN-Rail installation, 85 … 265 VAC power supply
F601B	Smart Power Meter, with 1kA / 50mm diameter Rogowski coil and voltage test cables, DIN-Rail installation, 24 VDC power supply
F601B-H	Smart Power Meter, with 3kA / 50mm diameter Rogowski coil and voltage test cables, DIN-Rail installation, 24 VDC power supply
F601A-P-IoT	Smart Power Meter Suit, with IoT-4G module, with display, with 1kA / 50mm diameter Rogowski coil and voltage test cables, wall-mounted installation, 85 … 265 VAC power supply
F601A-H-P-IoT	Smart Power Meter Suit, with IoT-4G module, with display, with 3kA / 50mm diameter Rogowski coil and voltage test cables, wall-mounted installation, 85 … 265 VAC power supply
F601B-P-IoT	Smart Power Meter Suit, with IoT-4G module, with 1kA / 50mm diameter Rogowski coil and voltage test cables, wall-mounted installation, 24VDC power supply
F601B-H-P-IoT	Smart Power Meter Suit, with IoT-4G module, with 3kA / 50mm diameter Rogowski coil and voltage test cables, wall-mounted installation, 24VDC power supply

* For other measurement requirements, please consult sales
* Portable protective case is available as an option. Please refer to the accessories list (P126) for details
* Wi-SUN wireless is available as an option