

Powertek

PTK FCM Series

Precision Constant Current AC Power Supply



Model: PTK FCM-11000

1.2 - 3.0 kVA • Range 0–10 V, 0–5 V • Models from 120A..600A • 40–500 Hz

HIGHLIGHTS

- Stable AC Calibration source used for calibration of breakers, current sensors and shunts
- Current transformer calibration
- AC current 1A..120 A, 2A...300 A, 40–500 Hz
- Total accuracy 0.25% all ranges
- 0.1% Accuracy Enhancement
- Used as an Integral part of power calibration system
- Optional test coil providing 6000Arms
- GPIB emulation of other transconductance amplifiers
- Over Voltage, current and VA protection features

Typical Applications

- Rogowski Coil Current Sensors
- Current Transformer and magnetic component testing
- Current injection and relay testing
- Energy meters, power calibration systems
- Circuit breaker verification
- Cable and busbar testing
- Research and development laboratories
- Production and end-of-line testing

Product Overview

The PTK FCM Series Linear AC Constant Current Power Supply is an easy-to-use precision low-voltage, stable high-current AC source for calibration intended for laboratory, production and electrical test applications. It uses linear amplification technology to produce a low-distortion sine wave with accurate programmable voltage, current and frequency control. The unit is rugged, supplied with castor wheels allowing portability in workshops and laboratories.

Performance Features

- User interface with magnitudes ramp times and load protection
- Linear amplifier constant current architecture
- Pure sine wave output
- 0–10 V, 0–5 V adjustable output
- 1–120 A, 2–300 A adjustable constant current
- 40–500 Hz programmable frequency
- Excellent load regulation
- High measurement accuracy with Enhancement options
- GPIB, RS485, RS-232 as standard
- RS485 (Modbus) communications Labview API
- Floating output up to 450 Vpk, compliance voltage 10Vrms
- Frequency sync when used with voltage calibrator
- Comprehensive protection functions

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PTK FCM AC Source Technical Specifications

Model	PTK FCM-110001.2LC
Capacity	1.2kVA
Phase	1 Phase in / 1 Phase out
INPUT	
Nominal Voltage	115/230V±10%, 1 phase
Frequency	47~63Hz
OUTPUT	
Nominal Voltage	0-10V, 0-5V Adjustable
Current	1-120A..200..300A & 2-200...400..600 Adjustable
Frequency	40-500Hz, 0.1Step
Waveform	Pure Sine Wave
Total Harmonic Distortion (THD)	0.8% at Resistive Load
Voltage Regulation	±0.1%
Load Regulation	±0.5%
Frequency Regulation	±0.01%
Measuring accuracy	-Voltage/Current : 0.5% FS+5 digits - Power : 0.5% FS+5 digits - Frequency : 0.01% FS+5 digits
Interface	RS-232, RS485 (Modbus), ethernet
LCD Display	Voltage, Current, Arms, Frequency, Power, PF
Protection	Over Current, Over Temp, Short Circuit, Over Load
Operating Temperature	0~40°C, 20%~95% RH
Dimension:W×D×H(mm)	430*550*440mm
Weight	60kg

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For the **0–10V** output series, we offer the following options:

Model	Output	Current
1kVA	0-10V	0-100A
1.2kVA	0-10V	0-120A
1.5kVA	0-10V	0-150A
2kVA	0-10V	0-200A
2.5kVA	0-10V	0-250A
3kVA	0-10V	0-300A

For the **0–5V** output series, we offer the following options:

Model	Output	Current
500VA	0-5V	0-100A
1kVA	0-5V	0-200A
1.5kVA	0-5V	0-300A
2kVA	0-5V	0-400A
2.5kVA	0-5V	0-500A
3kVA	0-5V	0-600A

Ordering Information

Model PTK FCM-110001.2/10 — 1.2 kVA Linear AC Constant Current Power Supply.

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