

NGPS 30-300E

**High-stability
Digital Power
Supply 30 A @ 300
V (10 kW) - 400 VAC
three-phase input**



Features

- 19"-3U stand-alone crate
- 100 A-100 V, 200 A-50 V, 300 A-30 V
- Configurable digital control loop
- PARALLEL operation up to 40 kW
- Current or Voltage regulation
- 1 ppm/°C temperature dependence
- Excellent long-term stability
- External Analog Control and Auxiliary Analog Inputs
- Waveform Generation at 40 ksps
- Embedded 4-channel Oscilloscope
- Embedded Web-Server
- External Interlock and Status Signals
- Local Display and Controls
- 10/100/1000 Mbit Ethernet
- Fast SFP interface (10 kHz update)
- Water-cooled models available
- Co-designed with BOCEM

Description

NGPS 30300E is a single channel 400 Vac - 300 Vdc converter, which allows to integrate into the EASY channels control also the management of the power supplies. Configurable digital control loop, and parallel operation up to 40 kW. Features also encompass current or voltage regulation, 1 ppm/°C temperature dependence, long-term stability, and external analog control.

NGPS 30300E offers waveform generation at 40 ksps, an embedded 4-channel oscilloscope that allows monitoring up to four different values (e.g. current, voltage, etc.) with a sampling rate of 40 kHz by using an internal DMA, and embedded web-server for remote operation. It has a broad application range, including particle accelerators and medical imaging, showcasing flexibility through 10/100/1000 Mbit Ethernet connectivity and fast SFP interface.

Technical Specifications

Packaging

19"-wide, 3U-high Euromechanics rack; Depth: 647 mm (including connectors) Weight: 18 Kg

Output Polarity

Positive

Output Voltage

300 V

Output Current

30 A

Max. Output Power

9 kW

AC Input

Three-phase 400 VAC \pm 10%, 50/60 Hz

Regulation Type

Constant Current (CC) or Constant Voltage (CV)

Output Insulation

500 V

Output Setting Resolution - CC/CV

>19 bit

Output Readout Resolution

24 bit

Output Accuracy In CC

< 0.01 %

Output Accuracy In CV

< 0.05 %

Remote Sensing Compensation

Up to 2 V

Operating Current Range

2-100 %

Temperature Stability

< 0.0002 %K in CC mode < 0.005 %K in CV mode

Efficiency

> 90 %

Power Factor (at full-load)

> 0.92

PARALLELING Option

Up to 4 modules - via front SFP optical links

Operating Ambient Temperature

0 ... 40°C

Communication Interfaces

x Ethernet 10/100/1000 Mbit TCP-IP and UDP 2 x SFP/SFP+ ports

External Signals

Analog Control Input (0-10V) Trigger Input

Ordering Options

Code	Description
WNGPS30300VC	NGPS 30-300 AC/DC Converter for EASY5000 and EASY6000 400 V 3-phase 300 V 9000 W

Related Products

NGPS 200-50E



High-stability Digital Power Supply 200 A @ 50 V (10 kW) – 400 VAC three-phase input

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