LAMBDA (TDK-LAMDA)

EMS Series Single Phase 10

The TDK-Lambda EMS Series consists of high-power, high-efficiency switch-mode AC to DC programmable power supplies designed for precise regulation and high packaging density. Operating as a constant voltage/constant current source with automatic crossover, they are widely used in semiconductor processing, medical, scientific, and research applications. This series supports analog programming as standard, with optional digital interfaces available.

SPECIFICATIONS

General

Interfaces	Analog programming (standard), GPIB and RS-232 digital interfaces (optional)
Display	Dual 3.5-digit LED digital displays (voltage and current)

Physical

Power Supply	115 VAC / 208-240 VAC, 47-63 Hz, single-phase (model and option dependent)
Operating Temperature	0 to +50 °C °C
Dimensions (W×H×D)	482.6 mm x 44.4 mm x 457.2 mm mm
Weight	7.7 kg kg

Model Configurations

EMS 7.5-130 Output	7.5 V, 130 A
EMS 10-100 Output	10 V, 100 A
EMS 20-50 Output	20 V, 50 A
EMS 30-33 Output	30 V, 33 A
EMS 40-25 Output	40 V, 25 A
EMS 60-18 Output	60 V, 18 A
EMS 80-13 Output	80 V, 13 A
EMS 100-10 Output	100 V, 10 A
EMS 150-7 Output	150 V, 7 A
EMS 300-3.5 Output	300 V, 3.5 A
EMS 300-8 Output	300 V, 8 A
EMS 600-1.6 Output	600 V, 1.6 A
EMS 600-4 Output	600 V, 4 A

Output Ratings

Output Power Range	1000 W to 2500 W (model dependent)
Output Voltage Range	7.5 V to 600 V (model dependent)
Output Current Range	1.6 A to 300 A (model dependent)
Max Voltage Drift (8 Hours)	0.05% of rated output voltage
Max Current Drift (8 Hours)	0.05% of rated output current
Temperature Coefficient (Voltage)	0.02% / °C of rated output voltage
Temperature Coefficient (Current)	0.03% / °C of rated output current

Regulation & Dynamic Performance

Load Regulation (Constant Voltage)	0.1% of rated output voltage
Load Regulation (Constant Current)	0.1% of rated output current
Line Regulation (Constant Voltage)	0.1% of rated output voltage
Line Regulation (Constant Current)	0.1% of rated output current
Operating Mode	Constant voltage/constant current with automatic crossover

AC Input Specifications

AC Input Phase	Single-phase

Protection Features

Over Voltage Protection (OVP)	Standard, front panel adjustable
Over Temperature Protection (OTP)	Standard thermal shutdown

Analog Controls & Signals

Remote Sense Compensation Voltage	Up to 0.5 V per line

Environmental & Reliability

Storage Temperature Range	-40 to +85 °C
Cooling Method	Forced air by internal fan

Physical & Mechanical

Form Factor	19-inch rack-mount (1U or 2U high, model dependent)
Front Panel Controls	10-turn voltage and current potentiometers, power switch

TECHNOLOGY

High-frequency switching AC-to-DC power supply

APPLICATIONS

Semiconductor processing, medical equipment, scientific research, and laboratory applications

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.