

# Series EMS



# 600-5000

**WATTS**

## LABORATORY POWER SUPPLIES

### SINGLE OUTPUT

**Constant voltage/constant current operation**

**Voltage/current programming options**

**RS 232 and IEEE option**

**Single or threephase input**

**Choice of digital or analog meters**

**Height 1U to 3U**

**Guarantee 5 years**

#### INPUT

|                     |                                                                                                                                                                                                                               |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input voltage range | 600W/1000W<br>single 105-125VAC<br>or 190-253VAC<br>2000W*<br>single 190-250VAC<br>2500W*<br>single 190-253VAC<br>or threephase 190-253VAC<br>(user selectable)<br>5000W<br>threephase 190-253VAC<br>or threephase 342-418VAC |
| Input frequency     | 47 to 63Hz                                                                                                                                                                                                                    |
| Input protection    | fusible models 600 and 1000W<br>circuit breaker all models                                                                                                                                                                    |
| On/off              | on front panel                                                                                                                                                                                                                |

#### OUTPUT

|                                              |                                     |
|----------------------------------------------|-------------------------------------|
| Power                                        | 600 to 5000W                        |
| Output adjustment                            | potentiometer on front panel        |
| Constant voltage operation                   |                                     |
| Line regulation                              | 0.1%                                |
| Load regulation<br>0 at 100%                 | 0.1%                                |
| Programming<br>via resistance<br>via voltage | possible<br>possible                |
| Ripple & Noise                               | 75mV to 250mVcc<br>output dependent |
| Response time                                | 650µs for models<br>up to 20VDC     |
| Constant voltage operation                   |                                     |
| Line regulation                              | 0.1%                                |
| Load regulation<br>0 at 100%                 | 0.1%                                |
| Overcurrent protection                       | adjustable current limit            |
| Overvoltage protection                       | standard on models <300 VDC         |
| Remote sense                                 | standard                            |

#### GENERAL

|                    |                             |
|--------------------|-----------------------------|
| Display            | analog or digital           |
| Series operation   | possible                    |
| Parallel operation | possible                    |
| Efficiency         | 70 to 87% model dependent   |
| Application        | bench top or 19" rack mount |

#### ENVIRONMENTAL

|                       |                |
|-----------------------|----------------|
| Operating Temperature | 0°C to +70°C   |
| Derating              | >50°C @ 1%/°C  |
| Storage temperature   | -55°C to +85°C |
| Cooling               | Integral fan   |

\* Models 2000 and 2500W not CE marked

## ELECTRICAL SPECIFICATIONS

| Model       | Maximum power Watts | Output Volts | Amp. |
|-------------|---------------------|--------------|------|
| EMS 7.5-75  | 600                 | 0-7.5        | 75   |
| EMS 7.5-130 | 1000                | 0-7.5        | 130  |
| EMS 7.5-250 | 2000                | 0-7.5        | 250  |
| EMS 7.5-300 | 2500                | 0-7.5        | 300  |
| EMS 7.5-600 | 5000                | 0-7.5        | 600  |
| EMS 10-60   | 600                 | 0-10         | 60   |
| EMS 10-100  | 1000                | 0-10         | 100  |
| EMS 10-200  | 2000                | 0-10         | 200  |
| EMS 10-250  | 2500                | 0-10         | 250  |
| EMS 10-500  | 5000                | 0-10         | 500  |
| EMS 15-60   | 1000                | 0-15         | 60   |
| EMS 15-166  | 2500                | 0-15         | 166  |
| EMS 15-300  | 5000                | 0-15         | 300  |
| EMS 20-30   | 600                 | 0-20         | 30   |
| EMS 20-50   | 1000                | 0-20         | 50   |
| EMS 20-100  | 2000                | 0-20         | 100  |
| EMS 20-125  | 2500                | 0-20         | 125  |
| EMS 20-250  | 5000                | 0-20         | 250  |
| EMS 30-20   | 600                 | 0-30         | 20   |
| EMS 30-33   | 1000                | 0-30         | 33   |
| EMS 30-65   | 2000                | 0-30         | 65   |
| EMS 30-80   | 2500                | 0-30         | 80   |
| EMS 30-165  | 5000                | 0-30         | 165  |
| EMS 40-15   | 600                 | 0-40         | 15   |
| EMS 40-25   | 1000                | 0-40         | 25   |
| EMS 40-50   | 2000                | 0-40         | 50   |
| EMS 40-60   | 2500                | 0-40         | 60   |
| EMS 40-125  | 5000                | 0-40         | 125  |
| EMS 50-20   | 1000                | 0-50         | 20   |

| Model        | Maximum power Watts | Output Volts | Amp. |
|--------------|---------------------|--------------|------|
| EMS 60-10    | 600                 | 0-60         | 10   |
| EMS 60-18    | 1000                | 0-60         | 18   |
| EMS 60-33    | 2000                | 0-60         | 33   |
| EMS 60-40    | 2500                | 0-60         | 40   |
| EMS 60-80    | 5000                | 0-60         | 80   |
| EMS 80-7.5   | 600                 | 0-80         | 7.5  |
| EMS 80-13    | 1000                | 0-80         | 13   |
| EMS 80-25    | 2000                | 0-80         | 25   |
| EMS 80-30    | 2500                | 0-80         | 30   |
| EMS 80-60    | 5000                | 0-80         | 60   |
| EMS 100-10   | 1000                | 0-100        | 10   |
| EMS 100-20   | 2000                | 0-100        | 20   |
| EMS 100-25   | 2500                | 0-100        | 25   |
| EMS 100-50   | 5000                | 0-100        | 50   |
| EMS 150-7    | 1000                | 0-150        | 7    |
| EMS 150-13   | 2000                | 0-150        | 13   |
| EMS 150-16   | 2500                | 0-150        | 16   |
| EMS 150-33   | 5000                | 0-150        | 33   |
| EMS 200-12.5 | 2500                | 0-200        | 12.5 |
| EMS 200-25   | 5000                | 0-200        | 25   |
| EMS 250-10   | 2500                | 0-250        | 10   |
| EMS 300-3.5  | 1000                | 0-300        | 3.5  |
| EMS 300-6    | 2000                | 0-300        | 6    |
| EMS 300-8    | 2500                | 0-300        | 8    |
| EMS 300-16   | 5000                | 0-300        | 16   |
| EMS 600-1.6  | 1000                | 0-600        | 1.6  |
| EMS 600-3.3  | 2000                | 0-600        | 3.3  |
| EMS 600-4    | 2500                | 0-600        | 4    |
| EMS 600-8    | 5000                | 0-600        | 8    |

## OPTIONS

EMS

Output voltage range

Output current range

Display U and I

Suffix

Analog

Digital

Omit

D

For models 600W and 1kW : Unique digital display

Options

Description

Suffix

Locking bush

10 turn control

Output terminal covers

RS232/IEEE488 Programmer

CE Marked (input AC : -3 and -13)

LB

10T

TC

RSTL

CE

Input Selection

| Power range    | Input voltage range                                      | Suffix |
|----------------|----------------------------------------------------------|--------|
| 600Watts & 1kW | 105-125VAC 47-63 Hz 1Ø                                   | -1     |
| 600Watts & 1kW | 190-253VAC 47-63 Hz 1Ø                                   | -2     |
| 600Watts & 1kW | 90-110VAC 47-63 Hz 1Ø                                    | -6     |
| 2kW            | 190-250VAC 47-63 Hz 1Ø                                   | -5     |
| 2.5kW          | 200-253VAC 1Ø and 190-253VAC 3Ø 47-63Hz, user selectable | -2     |
| 5kW            | 190-253VAC 3Ø 47-63Hz                                    | -2     |
| 5kW            | 342-418VAC 3Ø 47-63Hz (5 wire)                           | -8     |
| 5kW            | 374-456VAC 3Ø 47-63Hz (5 wire)                           | -9     |
| 600Watts, 1kW, | 207-253VAC 47-63Hz 1Ø CE Marked                          | -3     |
| 5kW            | 360-440VAC 47-63Hz (5 wire) CE marked                    | -13    |

Programming options

| Programme |         | Monitoring     |         | Suffix  |
|-----------|---------|----------------|---------|---------|
| voltage   | current | voltage        | current |         |
| 0-5V      | 0-5V    | 0-full rated V | 0-100mV | -0699   |
| 0-10V     | 0-10V   | 0-full rated V | 0-100mV | -0891   |
| 0-5V      | 0-5V    | 0-5V           | 0-5V    | -0806-1 |
| 0-10V     | 0-10V   | 0-10V*         | 0-10V   | -0806   |

\*for models with output voltage >10V

## DIMENSIONS

| Model | Height | Length | Depth | Rack height | Weight kg |
|-------|--------|--------|-------|-------------|-----------|
| 600W  | 44     | 483    | 473   | 1U          | 7         |
| 1000W | 44     | 483    | 473   | 1U          | 7         |
| 2000W | 88.1   | 483    | 496   | 2U          | 13        |
| 2500W | 88.1   | 483    | 496   | 2U          | 16        |
| 5000W | 132.6  | 483    | 576   | 3U          | 27        |

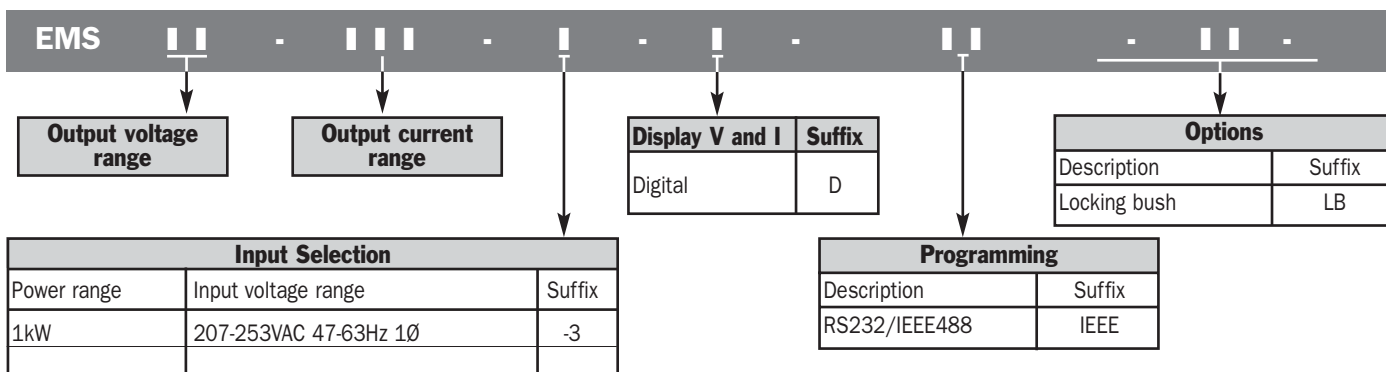
## EMS 1KW WITH EMBEDDED IEEE

### GENERAL

|                                             |                        |
|---------------------------------------------|------------------------|
| Output Power                                | 1KW                    |
| IEEE/RS232                                  | Embedded in 1U package |
| Remote voltage and monitoring 0.5V or 0-10V | standard               |
| Remote current and monitoring 0-5V or 0-10V | standard               |
| Voltage and current pots                    | standard               |
| Digital meters                              | standard               |
| Terminal cover                              | standard               |

## TABLE OF MODELS

| Model       | Maximum power | Output |       |
|-------------|---------------|--------|-------|
|             | Watts         | Volts  | Amps  |
| EMS 7.5-130 | 1000          | 0-7.5  | 0-130 |
| EMS 10-100  | 1000          | 0-10   | 0-100 |
| EMS 20-50   | 1000          | 0-20   | 0-50  |
| EMS 30-33   | 1000          | 0-30   | 0-33  |
| EMS 40-25   | 1000          | 0-40   | 0-25  |
| EMS 60-18   | 1000          | 0-60   | 0-18  |
| EMS 80-13   | 1000          | 0-80   | 0-13  |
| EMS100-10   | 1000          | 0-100  | 0-10  |
| EMS 150-7   | 1000          | 0-150  | 0-7   |
| EMS 300-3.5 | 1000          | 0-300  | 0-3.5 |
| EMS 200-2.5 | 1000          | 0-400  | 0-2.5 |
| EMS 600-1.6 | 1000          | 0-600  | 0-1.6 |



## DIMENSIONS

| Model | Height | Depth | Rack height | Weight kg |
|-------|--------|-------|-------------|-----------|
| 1kW   | 44mm   | 430mm | 1U          | 7kg       |

Series EMS

Invensys  
**LAMBDA** 