

- SMALL SIZE
- UNIVERSAL INPUT SUPPLY
- HIGH PACKING DENSITY
- NO VENTS
- COOL RUNNING
- CE APPROVED
- UL APPROVED



## DIN RAIL MOUNTED POWER SUPPLY SEM1300

### DESCRIPTION

The SEM1300 is a DIN rail mounted power supply that provides a regulated 24V DC output @ 250mA from an AC supply ranging from 90 to 253V AC 50/60 Hz.

The SEM1300 is ideally suited for powering 24V process instrumentation and signal conditioning modules. Its small size allows for a compact installation.

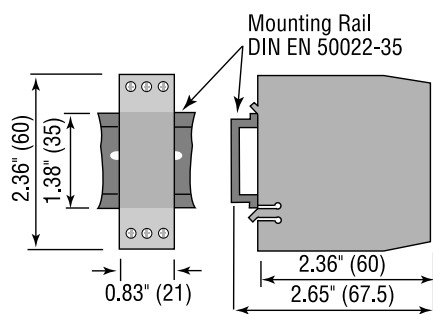
The high efficiency of the SEM1300 power supply and its very cool running operation ensures a lower ambient temperature rise and hence improved reliability.

### APPROVALS

Tested to:

- IEC 801-2 Susceptibility to electrostatic discharge
- IEC 801-3 Radiated Susceptibility
- IEC 801-4 Susceptibility to conducted interference
- EN 55022 Radiated emissions
- UL 508 Electrical Safety

### MECHANICAL DETAILS



SEM1300 Weight approx. 3.6oz (100 g)

### ORDER CODE

**SEM1300** 24V DC @ 250mA output

### SPECIFICATIONS @ 68°F

#### GENERAL

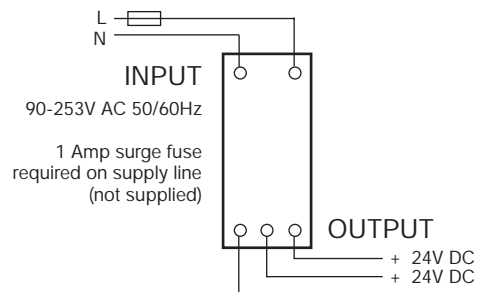
##### INPUT

- Supply range** 90-253V AC 50/60Hz
- Efficiency** 70% typical @ 230V AC 250mA
- Protection** 1 Amp anti-surge fuse must be fitted in live supply line (not supplied)
- Filter** Internal EMC filter
- Connections** Captive screw terminals

##### OUTPUT

- Voltage** 24V DC  $\pm$  0.5% @ 250mA
- Ripple** 100mV p-p
- Indication** LED power on
- Isolation** 2500 V flash tested to supply
- Connections** Captive screw terminal
- Cable Size** 12 AWG Solid / 14 AWG Stranded
- Case Material** Polyamide (Grey)
- Case Flammability** To UL94-VO VDE 0304 Part 3 Level IIIA
- Mounting** Top Hat rail to DIN EN 50022-35
- Ambient Operating** 32° to 158°F  
10-95% RH Non-condensing  
NEMA 1

### CONNECTION DETAILS



## STATUS INSTRUMENTS INC.

PO Box 548, 456 Park Ave., Scotch Plains, NJ 07076  
 Phone: (800) 700-3272 Fax: (800) 700-5468 (US & CA only)  
 Phone: (908) 490-0232  
 Email: rc@statinst.com Internet Address: www.statinst.com



SEM1300 7.02/PDF

- LOOP POWERED
- SMALL SIZE
- LINE POWER RATED RELAYS
- SINGLE OR DUAL TRIP
- FAIL SAFE LED INDICATION
- ACTIVE HIGH OR LOW



## LOOP POWERED TRIP AMPLIFIERS SEM1401 AND SEM1402

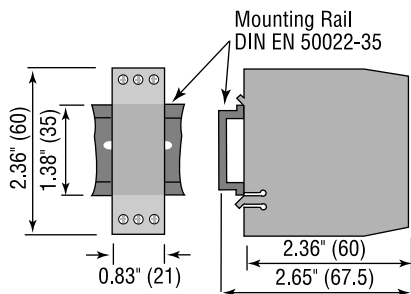
### DESCRIPTION

The SEM1401 and SEM1402 are loop powered trip alarms designed to accept a 4-20mA signal from a transmitter and to provide a single trip output (SEM1401) or two individual trip outputs (SEM1402). By utilizing the loop power, no separate supply is required to power the trip alarms. In turn, wiring is simplified and costs are reduced. Their small size and the line rated relay contacts make them the ideal choice for many trip alarm applications.

### APPROVALS

**EMC Testing.** All versions are tested to:  
 IEC 801-2 Susceptibility to electrostatic discharge  
 IEC 801-3 Radiated Susceptibility  
 IEC 801-4 Susceptibility to conducted interference  
 EN 55022 Radiated emissions  
**EMC** Less than 0.5% error to EN 50082-1

### MECHANICAL DETAILS



SEM1401/02 Weight approx. 3.6oz (100 g)

### ORDER CODE

- SEM1401** Single relay N.O./N.C. contacts
- SEM1402** Dual trip N.O. contacts

### SPECIFICATIONS @ 68°F

#### GENERAL

##### INPUT

**Type** Two wire 4-20mA, (50mA Max)  
**Protection** Reverse connection protected  
**Loop Drop** 5V Max

##### OUTPUT

**Alarm Contact(s)** HIGH or LOW Active  
 SEM1401 single relay with N.O. and N.C. contacts  
 SEM1402 two single pole relays with N.O. contacts sharing a common connection  
**Resistive load** 2A @ 250V AC/ 125V DC  
**Alarm LED(s)** on module front face  
**Setpoint** 0-100% multi-turn trim potentiometer(s) accessed on module front face  
**Repeatability** ±0.2%  
**Hysteresis** SEM1401 Adjustable 0.1 - 5% single turn trim pot on module front face  
 SEM1402 Fixed 0.5%

##### Delay Failsafe

0.5 second fixed delay  
 On loss of signal:  
 HIGH Alarm...No alarm condition  
 LOW Alarm...Alarm condition (i.e Alarm operates as if signal has fallen to -25%)  
**Isolation** 3000V AC rms between contacts and input  
 1000V AC rms between contacts

##### Ambient Operating

32° to 158°F  
 10-95% RH non-condensing  
 NEMA 1

##### Connections

**Cable Size** 12 AWG gage solid / 14 AWG gage stranded  
**Case Material** Gray polyamide  
**Flammability** To UL94-V0 VDE 0304 Part 3 level IIIA



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