

Laboratory Power Supplies

LD Series

Single- and Dual Output

Linear regulated with high performance
 Voltage and current regulated
 All outputs with galvanic isolation
 Series and parallel operation
 Master - slave - operation
 Programming and monitoring current - voltage
 Intended for 19" rack

Option: Installed Interface Euro Card IEEE 488.2 (GPIB)/RS232 with Lab View Driver INT2E series
 Integrated USB1.1 interface with driver software
 External CAN Open Interface (on request)



Units for Laboratory and Test

| | |
|----------------------------------|--|
| Input: | |
| Input voltage (AC) | 230 VAC + 10%, 50 – 60 Hz |
| Output: | |
| Output voltage (DC) | see table |
| Output current | see table |
| Regulation: | |
| Line regulation | voltage $\leq 0,01\% U_A + 1 \text{ mV}$ |
| (AC line change $\pm 10\%$) | current $\leq 0,1\% I_A + 2 \text{ mA}$ |
| Load regulation | voltage $\leq 0,01\% U_A + 1 \text{ mV}$ |
| (0 – 100% output | |
| load change) | current $\leq 0,1\% I_A + 2 \text{ mA}$ |
| Dynamic response | $\leq 50 \mu\text{s}$ |
| Ripple and noise | voltage: $I_{\text{nom}} \leq 10 \text{ A}: 0,01\% U_{\text{out}} + 1 \text{ mV}$ $I_{\text{nom}} > 10 \text{ A}: 0,08\% U_{\text{out}} + 1 \text{ mV}_{\text{pk-pk}}$ current: $\leq 0,05\% I_{\text{out}} + 5 \text{ mA}_{\text{pk-pk}}$ $\leq 0,05\% / \text{K}$ |
| Temperature coefficient | |
| Protection: | |
| Overload protection | short circuit protection |
| Overvoltage protection | option |
| Environmental Conditions: | |
| Operating temperature | 0 – + 50 °C |
| Cooling | free air convection |
| Safety: | |
| Safety standard | EN 61010-1 |
| Isolation | |
| Input - output: | $U_{\text{out}} \leq 60 \text{ V}: 2,3 \text{ kV}_{\text{rms}}$ $U_{\text{out}} > 60 \text{ V} - 150 \text{ V}: 3,7 \text{ kV}_{\text{rms}}$ $1,35 \text{ kV}_{\text{rms}}$ |
| Input - ground: | $U_{\text{out}} \leq 100 \text{ V}: 500 \text{ V}_{\text{rms}}$ |
| Output - ground: | $U_{\text{out}} > 100 \text{ V} - 150 \text{ V}: 820 \text{ V}_{\text{rms}}$ |
| EMC: | |
| Input EMI filter | EN61000-6-3 |
| Input immunity | EN61000-6-2 |

| | |
|---------------------------------|--|
| Operation and Control: | |
| Programming | voltage and current (reference - U_{out}) with $0 - 10 \text{ V} \cong 0 - 100\% U_{\text{out}}, I_{\text{out}}$ and master - slave - operation |
| Master - slave - operation | same units |
| Parallel operation | same units without special action |
| Remote Sense | consult factory up to 0,25 V per wire |
| Instruments | for voltage and current LED digital, 3½digits accuracy: V-meter 0,2% $\pm 1 \text{ d}$ A-meter 0,5% $\pm 1 \text{ d}$ |
| Adjustment | voltage and current each 2 potentiometers, coarse/fine |
| Connectors: | |
| Input | Euro - plug |
| Output | 4 mm banana jack, 2 jacks for + and 2 for - , programming: 25 pole sub D plug, rear side |
| Physical Specifications: | |
| Dimensions | see drawing and table |

Digital Instruments:

| Output Voltage / Current (V) / (A) | Case type | | | | | | Case depth* (mm) | Model Number |
|---------------------------------------|-----------|---|---|---|---|---|---------------------|---------------|
| | A | B | C | D | E | F | | |
| 0-7,5/0-5 | x | | | | x | | 262,5 | LD7,5/5G_ |
| 0-7,5/0-12 | x | | | | x | | 375 | LD7,5/12G_ |
| 0-7,5/0-25 | | x | | | | x | 375 | LD7,5/25G_ |
| 0-10/0-10 | x | | | | x | | 375 | LD10/10G_ |
| 0-15/0-2 | x | | | | x | | 225 | LD15/2G_ |
| 0-15/0-5 | x | | | | x | | 300 | LD15/5G_ |
| 0-15/0-8 | x | | | | x | | 375 | LD15/8G_ |
| 0-15/0-15 | | x | | | | x | 375 | LD15/15G_ |
| 0-30/0-1 | x | | | | x | | 225 | LD30/1G_ |
| 0-30/0-2 | x | | | | x | | 262,5 | LD30/2G_ |
| 0-30/0-4 | x | | | | x | | 337,5 | LD30/4G_ |
| 0-30/0-5 | x | | | | x | | 375 | LD30/5G_ |
| 0-30/0-8 | | x | | | | x | 300 | LD30/8G_ |
| 0-30/0-10 | | x | | | | x | 375 | LD30/10G_ |
| 0-30/0-20 | | | | x | | | 375 | LD30/20GD |
| 0-50/0-1 | x | | | | x | | 262,5 | LD50/1G_ |
| 0-50/0-2 | x | | | | x | | 300 | LD50/2G_ |
| 0-50/0-5 | | x | | | | x | 300 | LD50/5G_ |
| 0-50/0-10 | | x | | | | x | 450 | LD50/10G_ |
| 0-50/0-20 | | | | x | | | 450 | LD50/20GD |
| 0-75/0-1 | x | | | | x | | 300 | LD75/1G_ |
| 0-75/0-2 | x | | | | x | | 337,5 | LD75/2G_ |
| 0-75/0-5 | | x | | | | x | 375 | LD75/5G_ |
| 0-75/0-10 | | | | x | | | 375 | LD75/10GD |
| 0-100/0-0,5 | x | | | | x | | 225 | LD100/0,5G_ |
| 0-100/0-1 | x | | | | x | | 337,5 | LD100/1G_ |
| 0-100/0-2 | | x | | | | x | 337,5 | LD100/2G_ |
| 0-100/0-5 | | | x | | | | 337,5 | LD100/5GC |
| 0-150/0-0,5 | x | | | | x | | 262,5 | LD150/0,5G_ |
| 0-150/0-1 | x | | | | x | | 337,5 | LD150/1G_ |
| 0-150/0-2 | | x | | | | x | 337,5 | LD150/2G_ |
| 2 x 0-7,5/0-2 | x | | | | | x | 405 | LD2x7,5/2G_ |
| 2 x 0-7,5/0-5 | x | | | | | x | 215 | LD2x7,5/5G_ |
| 2 x 0-7,5/0-12 | x | | | | | x | 330 | LD2x7,5/12G_ |
| 2 x 0-15/0-1 | x | | | | | x | 330 | LD2x15/1G_ |
| 2 x 0-15/0-2 | x | | | | | x | 365 | LD2x15/2G_ |
| 2 x 0-15/0-5 | x | | | | | x | 330 | LD2x15/5G_ |
| 2 x 0-15/0-8 | x | | | | | x | 405 | LD2x15/8G_ |
| 2 x 0-30/0-0,5 | x | | | | | x | 330 | LD2x30/0,5G_ |
| 2 x 0-30/0-1 | x | | | | | x | 365 | LD2x30/1G_ |
| 2 x 0-30/0-2 | x | | | | | x | 255 | LD2x30/2G_ |
| 2 x 0-30/0-4 | x | | | | | x | 365 | LD2x30/4G_ |
| 2 x 0-30/0-5 | x | | | | | x | 290 | LD2x30/5G_ |
| 2 x 0-30/0-10 | | | | x | | | 290 | LD2x30/10GD |
| 2 x 0-50/0-0,5 | x | | | | | x | 290 | LD2x50/0,5G_ |
| 2 x 0-50/0-1 | x | | | | | x | 180 | LD2x50/1G_ |
| 2 x 0-50/0-2 | x | | | | | x | 330 | LD2x50/2G_ |
| 2 x 0-50/0-5 | | | | x | | | 180 | LD2x50/5GD |
| 2 x 0-75/0-0,5 | x | | | | | x | 330 | LD2x75/0,5G_ |
| 2 x 0-75/0-1 | x | | | | | x | 365 | LD2x75/1G_ |
| 2 x 0-75/0-2 | x | | | | | x | 255 | LD2x75/2G_ |
| 2 x 0-100/0-0,5 | x | | | | | x | 330 | LD2x100/0,5G_ |
| 2 x 0-100/0-1 | x | | | | | x | 330 | LD2x100/1G_ |
| 2 x 0-150/0-0,5 | x | | | | | x | 365 | LD2x150/0,5G_ |
| 2 x 0-150/0-1 | x | | | | | x | 365 | LD2x150/1G_ |
| 2 x 0-150/0-2 | | | | x | | | 365 | LD2x150/2GD |

* with INT2E + 120 mm depth

Options:

19" front-panel for cases D and F
10 - turn potentiometer with scale

Overvoltage protection (max. 75 V)
Tracking

Installed IEEE 488.2 Interface Euro-Card INT2E

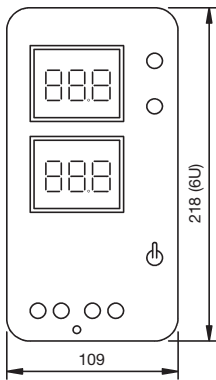
Input cable for external Interface INT2
Analog instruments for voltage and current,
1.5 % of full scale

Please order:

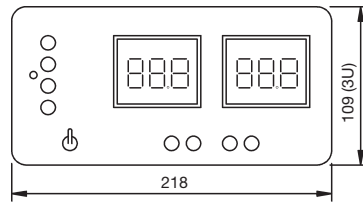
Last letter of the Model Number:
means case type (see following pages)

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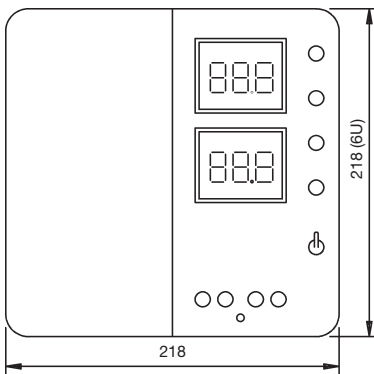
Single output:



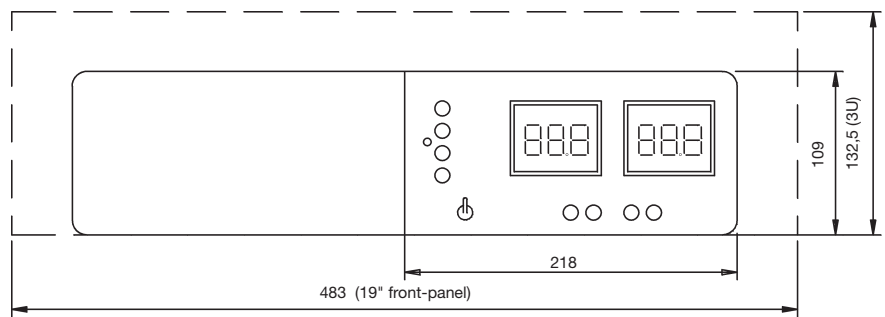
Case A



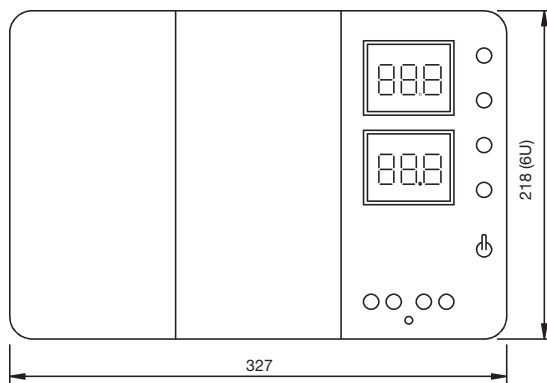
Case E



Case B

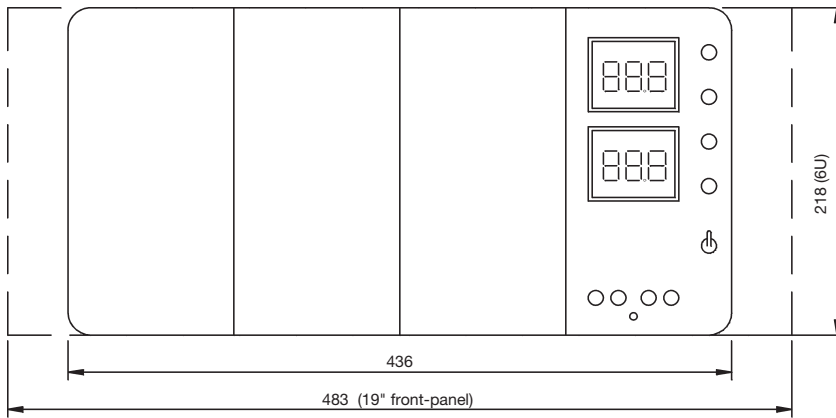


Case F



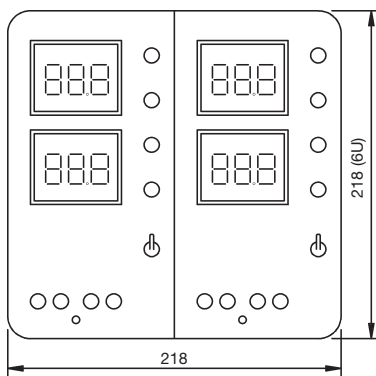
Case C

Dimensions in mm

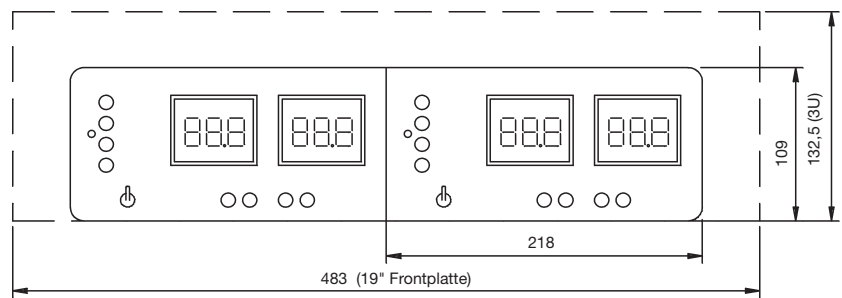


Case D

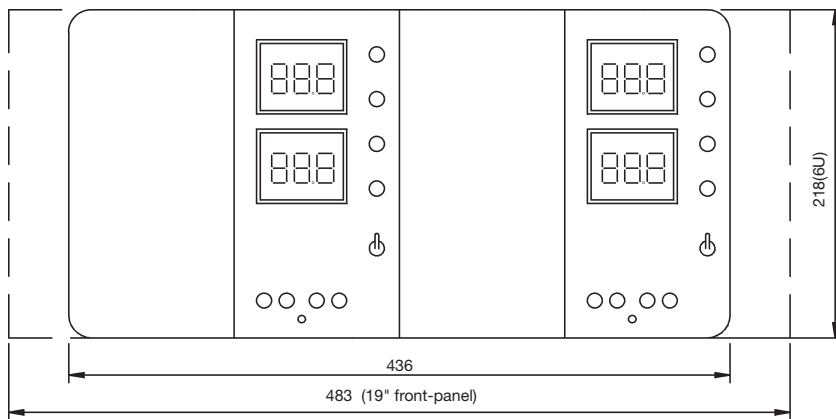
Dual output:



Case B



Case F



Case D