

acV +/-V Isolator SL345

The SL345 measures bipolar and ac voltage and current measurement input. The programming socket, under the front door flap is connected via an SL303 USB isolator to the SL300 Windows software. One of the 38 measurement ranges are selected used based on the user input requirements. The user can select from the 8 output ranges with input shape control, signal limits and zero offsets.

The **bipolar ranges** allows the process output to respond to inputs below zero to support an extended range of applications. The response time may be set using the 25mS/400mS Fast/Slow switch.

The **ac ranges** take multiple readings while detecting the zero crossing of the signal. After a complete cycle the ac value is calculated. This results in accurate amplitude measurement without ripple on signals as slow as 0.1Hz. As a new measurement is available after each input cycle the system response is quicker as the frequency increases. The "Sample Time" setting sets the fastest output update time, multiple readings are averaged. Slow measurements will update at selected sample time or cycle period if longer.

Key features of the SL339;

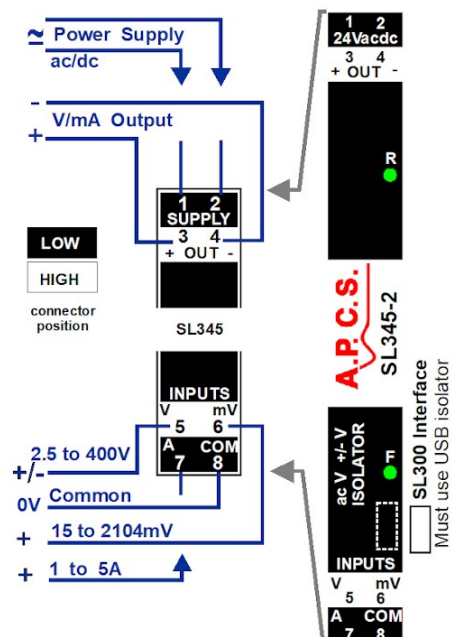
- Small 12.4mm case size.
- Wide range power supply.
- 12 Input and 11 output ranges.
- Fast input to output response.
- Input linearisation.
- User engineering units.
- Reverse and direct acting.
- Output signal limiting.



Ordering Detail

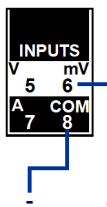
Order Code	Supply
SL345-20	10V - 60Vdc / 16 - 42Vac 50/60Hz

Connection and Controls



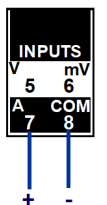
General Specifications

Size:	12.4W x 113H x 108D (mm).
Mounting:	Clip for 35mm DIN-Rail.
Housing material:	ABS / Poly-carbonate blend
Connection:	Plugable screw terminals.
Weight:	85g (including packaging).
Operating temperature:	-5...+65°C.
Temperature drift:	0.01% per °C.
EMC:	AS/NZS 4251.1 (EN 50081.1)
Response time:	LED on: 400mS, LED off: Rise 15mS, Fall 20mS.
Output ranges zero based:	1mA, 10mA, 20mA, 1V, 2V, 5V, 10V, 20V
Output drive:	10mA into 0 - 2kΩ, 20mA into 0 - 800Ω.
Load change effect:	< 0.05% (current limited to 22mA)
Input/output isolation:	>2.5kVrms.
Protection class:	IP40.
Calibration accuracy:	< 0.1% dc ranges.
AC frequency range:	0.1Hz to 400Hz.
AC range accuracy:	Better than: 1% for f < 100Hz, 2% for f > 100Hz
Linearity:	<0.1% dc ranges, 0.5%ac ranges.
Noise immunity:	130dB CMRR.



Millivolt Measurement, terminals 6 and 8

Bipolar mV ranges:	+/- 15, 32, 71, 129, 236, 526, 1052, 2104mV.
ac mV ranges:	10, 22, 50, 91, 166, 371, 743mVac, 1487mVac.
Overload:	20V continuous.
Input Impedance:	390KΩ



Voltage Measurement, terminals 5 and 8

Bipolar V ranges:	2.8, 6.1, 13.5, 24.5, 49.9, 99.8, 199.6, 399 V.
acV ranges:	1.95, 4.3, 9.5, 17, 32, 70, 141, 282 Vac.
Overload:	750V continuous.
Input Impedance:	> 1 MΩ

Current Measurement, terminals 7 and 8

Bipolar A ranges:	+/- 1, 2, 5A.
acA ranges:	1, 2, 5A.
Overload:	8A continuous.
Input Impedance:	0.01Ω

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