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## EDR82300 – Basic Input Module (BIM) for security

Low Power, Solid State, Winston Bridge Module with a N.O & N.C. output

**Features:** Utilizes only .65 sq. in. of PCB area and only .6" tall p/n EDR82300  
Designed to be an integrative part of any security/warning system.  
Tolerance to a wide power supply (8-18VDC) and 5% threshold accuracy provides an easy accommodation to various working conditions and maintaining a super-low false-rate triggering.  
The model is available with a N.C. (normal close) or N.O. (normal open) output and various currents and voltage specifications.

Please specify a field resistor (Rf) and the output requirements

EDR82300/xxx/y/v

Where: xxx is the value of the field resistor

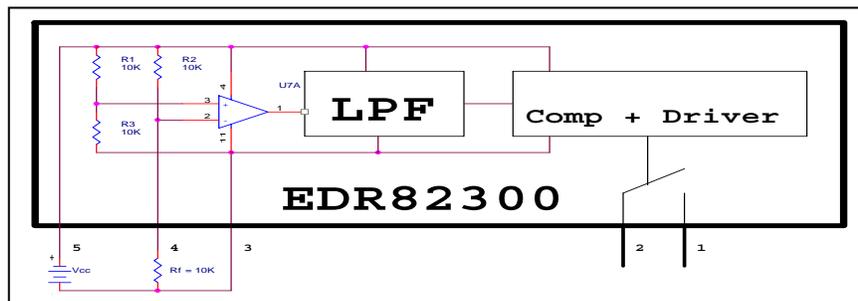
/y is the output terminal ("B") is for normal open and "A" is for normal close terminal).

/v is for the output specifications (a maximum voltage and current).

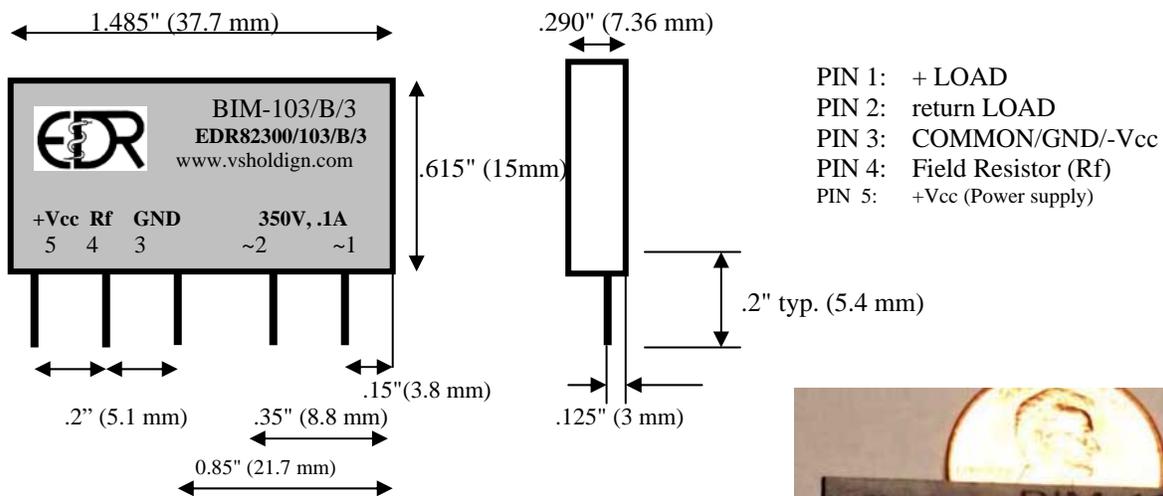
EDR82300/103/B/4 = 10 KΩ, normal open terminals, 350V&100mA (34 Ohm).

Please replace "xxx" with a value of the field resistor that you're planning to use. The first two "xx" should be replaced with the value and the last "x" is the multiplier, for example 103 is a "10" multiplied by power of 3 and the result is 10,000 Ohms.

Please choose an output voltage and current for the output terminals from the following page.



**Simplified block-diagram of the EDR82300**



All Dimensions are in inches (millimeters).

Input terminals (pins) are .032" (1 mm) diameter.

Output terminals (pins) .032"

Weight: (typical) .24 oz. (6.6 g)

Encapsulation: Thermally Conductive Epoxy



## SPECIFICATIONS for the power supply

	<u>Minimum</u>	<u>Typical</u>	<u>Maximum</u>
Power supply (Vcc)	5 VDC	12VDC	28 VDC
Current at Rf = 10K*	3 mA	3.5 mA	5 mA

\* the current depended of the value of the field resistor (Rf)

## Optically Isolated Solid State Modules for Security

N.O. and N.C. output – MOSFET type

Available voltages and currents for p/n EDR82300/xxx/y/v (to replace “v”)

OUTPUT SPECIFICATIONS (We rated our SSR’s for the maximum current without a heat sink)

“v” #	Load Voltage (V)	Current (mA)	“ON” resistance (Ohms)	Isolated Voltage (Vrms)	Off State Leakage μA	“y” A/B
1	100 AC/DC	300	4	1500	1	B
2	60 AC/DC	600	0.8	1500	1	B
3	60 AC/DC	2000	0.1	1500	1	B
4	60 DC	4000	0.05	1500	1	B
5	350	100	35	1500	1	B
6	350	120	35	1500	1	A

Output terminals of EDR82300 can be made for any reasonable voltage and current. In addition, we made the similar modules with a built-in DC/DC converter. Please contact us if you have any special requirements.

### Definitions:

**Normal close (N.C. or “A”)** - the output terminals is closed (conduct) only during “ENGAGED (ALARM SET).” At any other status, either the signal loop wiring compromised (a field resistor is outside pre-set range) or the power faulted the EDR82300’s output is “OFF” or not conducting.

**Normal open (N.O. or “B”)** - the output terminals is opened only during “ENGAGED” (ALARM SET). At any other status, either the signal loop wiring compromised (a field resistor is outside pre-set range) or the power faulted the EDR82300’s output is “ON” or conducting.

In the same packages, we manufacture a family of miniature, low power Solid State Relays, built with MOSFETs. Those relays designed for an extremely small input control current. Only 3.0 mA @ 2.6 VDC required to operate. Please request a data sheet 7090. Relays were designed as a replacement of a SSR with a TRAIC or SCR output in applications where a low power consumption and low leakage current are a must.

The above is one of solid-state modules manufactured by EDR Inc. to satisfy a wide range of customers. We made solid-state relays, input/output modules and intelligent breakers. Most of our products (about 72%) are manufactured to meet customers’ specifications.

Email to [info@vsholding.com](mailto:info@vsholding.com) your input and output requirements and we’ll offer you a part number, data sheet and the delivery schedule. A cost of a Solid State Device is very much tied to an ordered volume, in most cases a relay costs in low teens in order of 1000 or more.