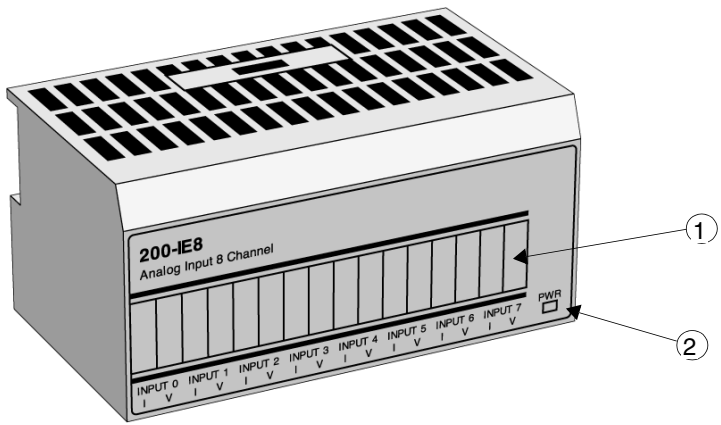
Analog Input Unit 200-IE8

200-IE8 is an I/O unit for 8 analog input signals. The inputs are filtered and the unit is galvanically insulated. The unit has 12 bit resolution. Each of the inputs can be either a voltage (0–10 V DC, ± 10 V DC) or a current (0–20 mA, 4–20 mA) input.



1 = Holder for insertable label for individual input designations
2 = Power ON indicator

Figure 85. Analog input unit 200-IE8.

Front Panel

Indicators

Indication	Function
PWR	Green LED, lit when 24 V DC power is ON

Functional Description

The 8 analog input signals are connected to the unit via the screw terminals on the terminal base unit.

The inputs are as a group of eight galvanically isolated from the serial bus by optocouplers and the 8 inputs are single ended.

Selection of voltage or current is made on the terminal base unit for each input. It is possible to connect either voltage or current to the input but not both simultaneously. Selection must also be set by the programming software.

Power for the internal logic is provided via an external power supply.

Since 200-IE8 does not receive power from the terminal base unit, 24 V DC must be applied to the unit before operation. If power is not applied, the unit position will appear to the adapter as an empty terminal base.

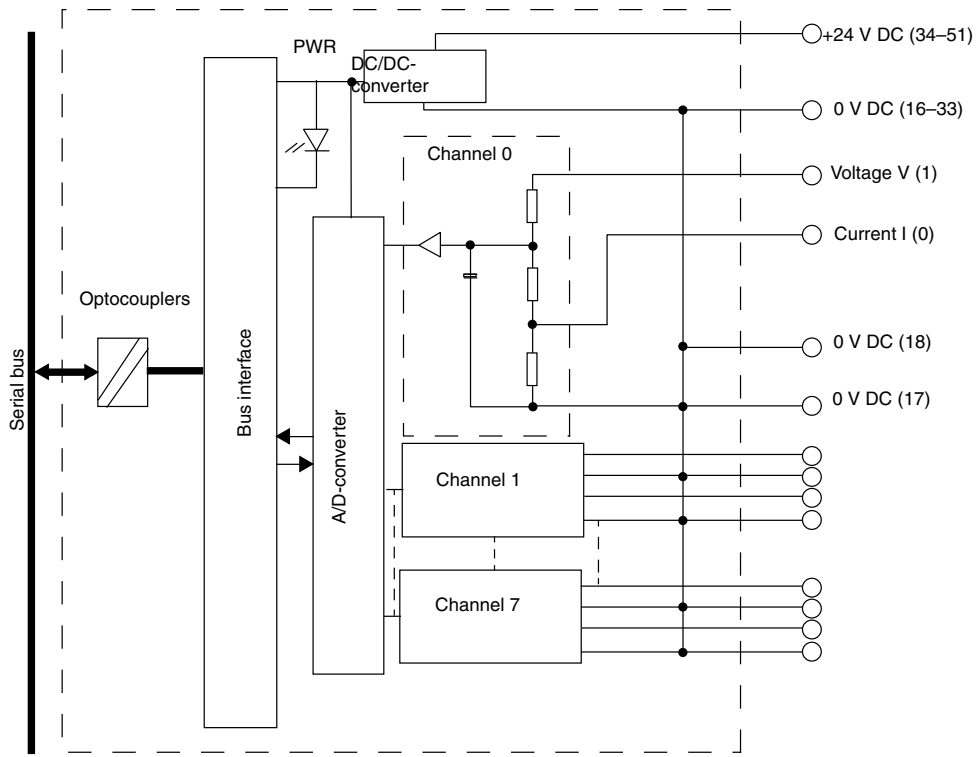


Figure 86. The 200-IE8 functional block diagram.

Numbers within parentheses in the diagram refer to signal terminals on the terminal base unit, (e.g. 200-TB3) connected to the I/O unit. Note that screw terminals 35–50 only exist on 200-TB3. Terminals 17–32 do not exist on 200-TBN and 200-TBNF.

200-IE8 Connections

Connect individual input wiring to numbered terminals as described in the table below. Always use shielded twisted-pair cables.

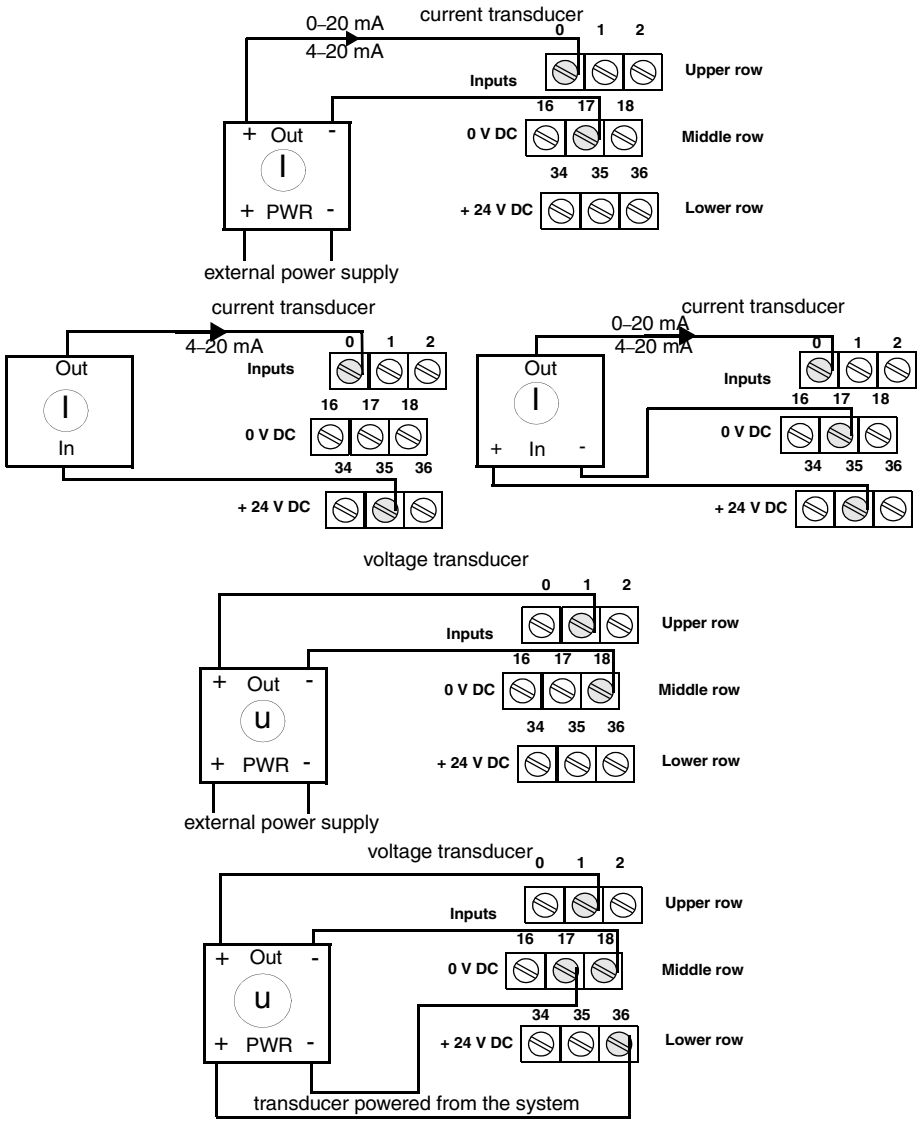


Figure 87. Wiring examples. Note that not all terminal base units have three rows.

Screw terminal connections

Input	200-TB2 & 200-TB3			200-TBN & 200-TBNF
	Terminals to be connected			
	Signal (upper row)	0 V DC (middle row)	24 V DC (lower row)	Signal
Current 0	0	17	35	0
Voltage 0	1	18	36	1
Current 1	2	19	37	2
Voltage 1	3	20	38	3
Current 2	4	21	39	4
Voltage 2	5	22	40	5
Current 3	6	23	41	6
Voltage 3	7	24	42	7
Current 4	8	25	43	8
Voltage 4	9	26	44	9
Current 5	10	27	45	10
Voltage 5	11	28	46	11
Current 6	12	29	47	12
Voltage 6	13	30	48	13
Current 7	14	31	49	14
Voltage 7	15	32	50	15
0 V DC		16–33		16, 33
+24 V DC			34–51	34, 51