

Tehničke specifikacije

Specification	EM231, 8 AI×16BIT
Physical Features	
Dimensions(W×H×D)	71.2×80×62mm
Power Loss(dissipation)	1W
Power Consumption	
From +5V(from I/O bus)	25 mA
From L+	30 mA
L+ voltage range,class 2 or DC sensor supply	20.4 ~ 28.8V DC
LED indicator	24 VDC Power Supply Good ON = no fault, OFF = no 24 VDC power
Analog Input Feature	
Number of analog input points	8 points
Isolation(field side to logic circuit)	500V AC for 1 minute
input type	Differential
Input Range	
current (unipolar)	0—20mA 、 4—20mA
Data Range	
Bipolar, full-scale range	0 ~ 32000
Input Resolution	
Current (unipolar)	0.000625mA (0 ~ 20mA) 0.0005mA (4 ~ 20mA)
Analog to digital conversion time	About 10ms
Analog input step response	About 80ms
Common mode rejection	40dB , DC to 60Hz
Common mode voltage	Signal voltage plus Common mode voltage must be $\leq \pm 12V$

Input Impedance	250Ω
Input filter attenuation	-3db @ 3.1kHz
Maximum input voltage	--
Maximum input current	30mA
ADC resolution	16BIT

Calibration and Configuration

- Location of the calibration and configuration switch

Configuration

Table 1 shows how to configure the EM 231 module using the configuration DIP switches. Switches 1, 2, and 3 select the analog input range. All inputs are set to the same analog input range. In this table, ON is closed, and OFF is open. (SW4 to SW6 should be set to the OFF position)

Table 1 EM 231 Configuration Switch Table to select Analog Input Range

Unipolar			Full-Scale Input	Resolution
SW1	SW2	SW3		
OFF	OFF	OFF	0 to 20mA	0.000625mA
	OFF	ON	4 to 20mA	0.0005mA

- Software Configuration

The EM231 8AI module has different beginning input address in different slot and its address is not in AIW but in VW, you can calculate the address by the following formula,

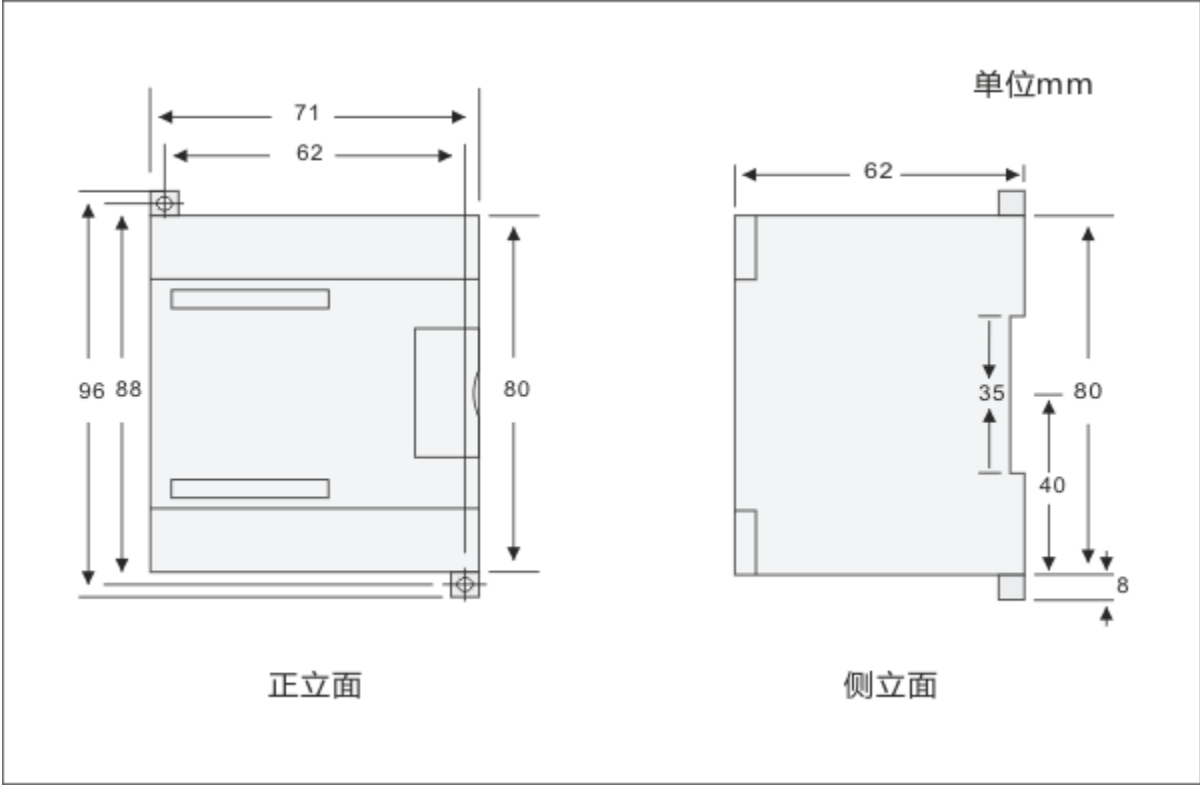
$$x(\text{VW}x) = a \times 64 + b \times 2 \quad (\text{a is the slot no., and b is the point no.})$$

Table 2 Address for the EM231 8AI

VW _x	Point 0	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Point 7
Slot 0	VW0	VW2	VW4	VW6	VW8	VW10	VW12	VW14
Slot 1	VW64	VW66	VW68	VW70	VW72	VW74	VW76	VW78
Slot 2	VW128	VW130	VW132	VW134	VW136	VW138	VW140	VW142
Slot 3	VW192	VW194	VW196	VW198	VW200	VW202	VW204	VW206
Slot 4	VW256	VW258	VW260	VW262	VW264	VW266	VW268	VW270
Slot 5	VW320	VW322	VW324	VW326	VW328	VW330	VW332	VW334
Slot 6	VW384	VW386	VW388	VW390	VW392	VW394	VW396	VW398

Note: Because the offset address of Td2X text display is also in VW0, so If you need to use Td2X text display in your system, please don't put the EM231 8AI×TC module in slot 0, or the td2X will not work normally. SIEMENS TD200 text displayer is same as TD2X.(SIEMENS is the trademark of SIEMENS AG.)

Dimenzije



Šema spajanja

