Analog Input Module 8 x I / V / PT 100, Floating (6ES5 460-7LA11)

Technical Specifications	
Number of inputs	8 voltage/current inputs or 8 inputs for PT 100
Galvanic isolation	yes (not for PT 100)
Input ranges (rated values)	±50 mV; ±500 mV; PT 100; ±1 V; ±5 V; ±10 V; ±20 mA; +4 to 20 mA (can be selected for four channels at a time using range cards)
Input resistance	± 50 mV: 10 M ± 500 mV: 10 M PT 100: 10 M ± 1 V: 90 k ; 2 ‰ ± 5 V: 50 k ; 2 ‰ ± 10 V: 50 k ; 2 ‰ ± 20 mA: 25 ; 1 ‰ ± 4...20 mA:31.25 ; 1 ‰
Type of connection for sensors	two-wire connection; four-wire connection for PT 100
Digital representation of the input signal	12 bits plus sign or 13 bits two's complement (2048 units= rated value)
Measuring principle	integrating
Conversion principle	voltage-time conversion (dual-slope)
Integration time (adjustable for opt. noise suppression)	20 msec. at 50 Hz 16.6 msec. at 60 Hz
Coding time max. (Single coding for 2048 units)	60 msec. at 50 Hz 50 msec. at 60 Hz
Scan time for - 8 inputs	 0.48 sec. at 50 Hz
Permissible voltage max. between inputs and between inputs and central grounding point (destruction limit)	18 V or 75 V for max. 1 msec. and a duty factor of 1 : 20
Permissible voltage max. between the reference potential of a nonfloating sensor and the central grounding point	75 V DC / 60 V AC

Error indication for - range violation - wirebreak in the sensor line		yes (exceeding 4095 units) can be specified in the range 50 mV, 500 mV and PT 100 (only measuring circuits)
Interference suppression for f=n x (50 / 60 Hz±1%) n=1, 2, to		
- common-mode noise min. (V_P<1 V)		100 dB
- series-mode noise min. (peak noise value < rated value of the range)		40 dB
Basic errors	± 50 mV	: ± 2 ‰
	± 500 mV	: ± 1.5 ‰
	PT 100	: ± 2 ‰
	± 1 V	: ± 3.5 ‰
	± 5 V	: ± 3.5 ‰
	± 10 V	: ± 3.5 ‰
	± 20 mA	: ± 2.5 ‰
	+4 to 20 mA	: ± 2.5 ‰
Operational errors (0°C to 55°C)	± 50 mV	: ± 5 ‰
	± 500 mV	: ± 4.5 ‰
	PT 100	: ± 5 ‰
	± 1 V	: ± 7.7 ‰
	± 5 V	: ± 7.7 ‰
	± 10 V	: ± 7.7 ‰
	± 20 mA	: ± 6.7 ‰
	+ 4 to 20 mA	: ± 6.7 ‰
Cable length - shielded max.		200 m (656 ft.); 50 m (164 ft.) at± 50 mV
Front connector		46 pins
Isolation rating		according to VDE 0160
Rated isolation voltage (channel to channel) - tested at		 500 V
Rated isolation voltage (channel to ⏚) - tested at		 500 V
Current consumption - rated value - ripple Vpp - permissible range (including ripple)		 24 V DC 3.6 V 20 to 30 V
Current consumption - from 5 V (internal) - from 24 V (external)	typ. typ.	 0.15 A 0.1 A
Power losses of the module	typ.	3 W
Weight	approx.	0.4 kg (0.88 lb.)