

Technical data

Module name	VIPA 331-7AF70	VIPA 331-7BF70
Dimensions and Weight		
Dimensions (WxHxD in mm)	40x125x117	
Weight	approx. 185g	
Data for specific module		
Number of inputs	8	
Length of cable - shielded	200m	
Programming specifications		
Input data	16Byte (1Word per channel)	
Parameter data	41Byte (in 11 Data records)	
Diagnostic data	16Byte	
Process interrupt data	4Byte	
Voltages, Currents, Potentials		
Power supply	DC 24V	
Reverse polarity protection	yes	
Isolation		
- between channels and backplane bus	yes	
- between channels	yes	
Permitted potential difference		
- between channels (U_{CM})	DC 30V	
- between channels and $M_{INTERNAL}$ (U_{ISO})	DC 75V / AC 60V	
Isolation tested with	DC 500V	
Current consumption		
- from the backplane bus (5V)	530mA	
- from power supply L+ (DC 24V)	62mA	
Power dissipation of the module	4.0W	
Analog value generation		
Measuring principle	Successive approximation	
Integration time/conversion time/resolution (per channel)		
- parameterizable	no (cycle time parameterizable)	
- Basic conversion time	25µs	
- Resolution (incl. over range) in Bit	15Bit + sign	
- Basic execution time of the module (all channels enabled)	25µs	

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Suppression of interference, Limits of error	VIPA 331-7AF70	VIPA 331-7BF70
Noise suppression for $f=nx$ ($f1\pm1\%$) ($f1$ = Interference frequency, $n=1,2,\dots$) - Common-mode interference ($U_{CM}<?V$)	$(U_{CM}<20V) >80dB$	
Crosstalk between the inputs	$>50dB$	
Operational limit (in the entire temperature range with reference to the input range) - Voltage input $\pm 10V$ - Current input $\pm 20mA$	$\pm 0.6\%$ $\pm 0.6\%$	
Basic error (Operational limit at $25^{\circ}C$ referred to the input range) - Voltage input $\pm 10V$ - Current input $\pm 20mA$	$\pm 0.4\%$ $\pm 0.4\%$	
Temperature error (reference to the input range)	$\pm 0.0025\%/K$	
Linearity error (with reference to the input range)	$\pm 0.02\%$	
Repeatability (in steady state at $25^{\circ}C$, reference to the input range)	$\pm 0.05\%$	
Status, Interrupts, Diagnostics		
Interrupts - Process interrupt when limit has been exceeded - Process interrupt at end of cycle - Diagnostic interrupt	parameterizable parameterizable parameterizable	
Diagnostic functions - Group error display - Diagnostic information read-out	red LED (SF) possible	
Data for selecting a sensor		
Input range - Current $\pm 20mA$ - Voltage $\pm 10V$	Input resistance 100Ω -	Input resistance - $120k\Omega$
Maximum input current for current input (destruction limit)	max. $40mA$	-
Maximum input voltage for voltage input (destruction limit)	-	max. $30V$
Connection of the sensor - for measuring voltage - for measuring current 2-wire transmitter	- possible	possible -