

SIMATIC DP, HART ANALOG INPUT SM 331, 8 AI, 0/4 - 20MA HART, FOR ET200M WITH IM153-2, 20 PIN



Figure similar

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	20 mA
from backplane bus 5 V DC, max.	120 mA
Output voltage	
Power supply to the transmitters	
• Rated value (DC)	24 V
Power loss	
Power loss, typ.	1.5 W
Analog inputs	
Number of analog inputs	8
• For resistance measurement	0

permissible input current for current input (destruction limit), max.	40 mA
<b>Input ranges</b>	
• Current	Yes
<b>Input ranges (rated values), currents</b>	
• 0 to 20 mA	Yes
• Input resistance (0 to 20 mA)	125 Ω
• -20 mA to +20 mA	Yes
• Input resistance (-20 mA to +20 mA)	125 Ω
• 4 mA to 20 mA	Yes
• Input resistance (4 mA to 20 mA)	125 Ω
<b>Cable length</b>	
• shielded, max.	800 m
<b>Analog value generation for the inputs</b>	
Measurement principle	Sigma Delta
<b>Integration and conversion time/resolution per channel</b>	
• Resolution with overrange (bit including sign), max.	16 bit
• Integration time, parameterizable	Yes
• Integration time (ms)	20 ms at 50 Hz; 16.6 ms at 60 Hz; 100 ms at 100 Hz
• Interference voltage suppression for interference frequency f1 in Hz	10 / 50 / 60 Hz
<b>Encoder</b>	
<b>Connection of signal encoders</b>	
• for current measurement as 2-wire transducer	Yes
• for current measurement as 4-wire transducer	Yes
<b>Errors/accuracies</b>	
<b>Operational error limit in overall temperature range</b>	
• Current, relative to input range, (+/-)	0.15 %
<b>Basic error limit (operational limit at 25 °C)</b>	
• Current, relative to input range, (+/-)	0.1 %
<b>Interrupts/diagnostics/status information</b>	
Diagnostic functions	Yes
<b>Alarms</b>	
• Diagnostic alarm	Yes
• Limit value alarm	Yes
<b>Diagnostic messages</b>	
• Diagnostic information readable	Yes
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
<b>Potential separation</b>	

#### Potential separation analog inputs

- between the channels and backplane bus

Yes

#### Isolation

Isolation tested with

500

#### Connection method

required front connector

20-pin

#### Dimensions

Width

40 mm

Height

125 mm

Depth

117 mm

#### Weights

Weight, approx.

205 g

**last modified:**

03/24/2017