

SIMATIC S7-300, Counter module FM 350-2, 8 channels, 20 kHz, 24 V encoder for counting, frequency measurement, speed measurement, period duration measurement, dosing incl. configuration package and electronic documentation on CD-ROM

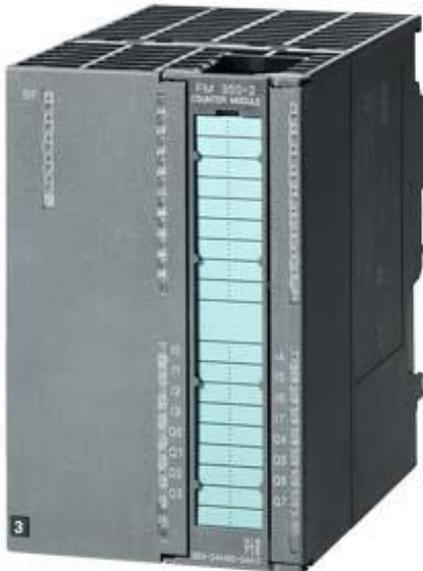


Figure similar

Supply voltage	
Auxiliary voltage 1L+, load voltage 2L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
Input current	
from load voltage L+ (without load), max.	150 mA
from backplane bus 5 V DC, max.	100 mA
Encoder supply	
NAMUR encoder supply	
• 8.2 V	Yes
Power loss	
Power loss, typ.	10 W
Digital inputs	
Number of digital inputs	8
Number of NAMUR inputs	8

Functions	1 each for gate start/ gate stop
<b>Input voltage</b>	
• for signal "0"	-3 to +5V
• for signal "1"	11 to 30.2 V
<b>Input current</b>	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	9 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— at "0" to "1", max.	50 µs
<b>Cable length</b>	
• shielded, max.	100 m
<b>Digital outputs</b>	
Number of digital outputs	8
Short-circuit protection	Yes
Limitation of inductive shutdown voltage to	L+ (-40 V)
<b>Output voltage</b>	
• for signal "1", min.	L+ (-0.8 V)
<b>Output current</b>	
• for signal "1" rated value	0.5 A
• for signal "0" residual current, max.	0.5 mA
<b>Output delay with resistive load</b>	
• "0" to "1", max.	300 µs
<b>Switching frequency</b>	
• with resistive load, max.	500 Hz
• with inductive load, max.	0.5 Hz
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	2 A
all other mounting positions	
— up to 40 °C, max.	2 A
<b>Cable length</b>	
• shielded, max.	600 m
• unshielded, max.	100 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
• Incremental encoder (asymmetrical)	Yes
• 24 V initiator	Yes
• 24 V directional element	Yes

• NAMUR encoder	Yes
• 2-wire sensor	Yes
<b>NAMUR encoder</b>	
• Input signal	to DIN 19 234
• Input current for signal "0", max.	1.2 mA
• Input current for signal "1", min.	2.1 mA
• Input delay, max.	50 µs
• Input frequency, max.	20 kHz
• Cable length, shielded, max.	100 m

### Interrupts/diagnostics/status information

Diagnostics function	Yes; Diagnostic information readable
<b>Alarms</b>	
• Diagnostic alarm	Yes; Parameterizable
• Hardware interrupt	Yes; Parameterizable
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes

### Counter

Number of counter inputs	8; 32 bit or ±31 bit
<b>Counter input 24 V</b>	
• Input voltage for signal "0"	-3 to +5V
• Input voltage for signal "1"	11 to 30.2 V
• Input current for signal "1", typ.	9 mA
• Counting frequency, max.	20 kHz; Incremental encoder: 10 kHz

### Potential separation

<b>Potential separation digital inputs</b>	
• between the channels and backplane bus	Yes; and shielding
<b>Potential separation digital outputs</b>	
• between the channels and backplane bus	Yes; and shielding
<b>Potential separation counter</b>	
• between the channels and backplane bus	Yes; and shielding

### Connection method

required front connector	1x 40-pin
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### Dimensions

Width	80 mm
Height	125 mm
Depth	120 mm

### Weights

Weight, approx.	460 g
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**last modified:** 06/09/2020