



Figure similar

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

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
• Short-circuit protection	Yes
• Output current, max.	200 mA
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
Input voltage	
• for signal "0"	-3 to +5V
• for signal "1"	11 to 30.2 V
Input current	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	9 mA
for NAMUR encoders	
— for signal "0", max.	1.2 mA
— for signal "1", min.	2.1 mA
Input delay (for rated value of input voltage)	
• Input frequency, max.	20 kHz
for standard inputs	
— at "0" to "1", max.	50 µs
for NAMUR inputs	
— at "0" to "1", max.	50 µs
Cable length	
• shielded, max.	100 m
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes

Limitation of inductive shutdown voltage to	L+ (-40 V)		
Output voltage			
for signal "1", min.	L+ (-0.8 V)		
Output current			
for signal "1" rated value	0.5 A		
for signal "0" residual current, max.	0.5 mA		
Output delay with resistive load			
"0" to "1", max.	300 µs		
Switching frequency			
with resistive load, max.	500 Hz		
with inductive load, max.	0.5 Hz		
Total current of the outputs (per group)			
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		
Cable length			
shielded, max.	600 m		
unshielded, max.	100 m		
Encoder			
Connectable encoders			
Incremental encoder (asymmetrical)	Yes		
24 V initiator	Yes		
24 V directional element	Yes		
NAMUR encoder	Yes; to DIN 19 234		
2-wire sensor	Yes		
Interrupts/diagnostics/status information			
Diagnostics function	Yes; Diagnostic information readable		
Alarms			
Diagnostic alarm	Yes; Parameterizable		
Hardware interrupt	Yes; Parameterizable		
Diagnostics indication LED			
Group error SF (red)	Yes		
Counter			
Number of counter inputs	8; 32 bit or ±31 bit		
Counter input 24 V			
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			
Potential separation digital inputs			
between the channels and backplane bus	Yes; and shielding		
Potential separation digital outputs			
between the channels and backplane bus	Yes; and shielding		
Potential separation counter			
between the channels and backplane bus	Yes; and shielding		
connection method			
required front connector	1x 40-pin		
Dimensions			
Width	80 mm		
Height	125 mm		
Depth	120 mm		
Weights			
Weight, approx.	460 g		
Classifications			
		Version	Classification
	eClass	14	27-24-22-05

eClass	12	27-24-22-05
eClass	9.1	27-24-22-05
eClass	9	27-24-22-05
eClass	8	27-24-22-05
eClass	7.1	27-24-22-05
eClass	6	27-24-22-05
ETIM	9	EC001422
ETIM	8	EC001422
ETIM	7	EC001422
IDEA	4	3567
UNSPSC	15	32-15-17-05

Approvals / Certificates			
General Product Approval	Marine / Shipping	other	Environment



[Confirmation](#)[Environmental Confirmations](#)

last modified:

4/7/2025