



Figure similar

SIMATIC DP, interface for ET 200PA SMART coated with redundancy capability, Timestamping suitable for isochronous mode New features: up to 12 modules can be used Slave Initiative for Drive ES and Switch ES Expanded quantity structure for HART auxiliary variables Operation of the 64-channel modules 32 signals / slot +++ Observe compatibility instructions in manual +++

General information	
Product type designation	IM 650-8 PH
HW functional status	01
Firmware version	V1.0.0
Vendor identification (VendorID)	81BBh
Supply voltage	
Rated value (DC)	24 V
external protection for power supply lines (recommendation)	2,5 A
Mains buffering	
<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	5 ms
Input current	
Current consumption, max.	650 mA
Inrush current, typ.	3 A
I^2t	0.1 A ² ·s
Output voltage	
Rated value (DC)	5 V
Output current	
for backplane bus (5 V DC), max.	1.5 A
Power loss	
Power loss, typ.	5.5 W
Address area	
Addressing volume	
<ul style="list-style-type: none"> Inputs Outputs 	244 byte 244 byte
Hardware configuration	
number of modules per DP device interface, max.	12
Time stamp	
Accuracy	1 ms; 1 ms at up to 8 modules; 10 ms at up to 12 modules
Number of message buffers	15
Messages per message buffer	20
Number of stampable digital inputs, max.	128; Max. 128 signals/station; max. 32 signals/slot
Time format	RFC 1119
Time resolution	0.466 ns
Time interval for transmitting the message buffer if a message is present	1 000 ms
Time stamp on signal change	rising / falling edge as signal entering or exiting
1. Interface	
Interface types	

<ul style="list-style-type: none"> • RS 485 • Output current of the interface, max. • Design of the connection 	<p>Yes</p> <p>70 mA</p> <p>9-pin sub D</p>
Interface types	
RS 485	
<ul style="list-style-type: none"> • Transmission rate, max. • automatic detection of transmission rate 	<p>12 Mbit/s</p> <p>Yes</p>
Protocols	
PROFIBUS	
PROFIBUS DP	
<ul style="list-style-type: none"> • Number of node addresses, max. 	1 to 125 permitted
Services	
<ul style="list-style-type: none"> — SYNC capability — FREEZE capability — Direct data exchange (slave-to-slave communication) 	<p>Yes</p> <p>Yes</p> <p>Yes; Sender</p>
Potential separation	
Potential separation exists	Yes
Isolation	
Isolation tested with	Isolation voltage 500 V
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. 	<p>0 °C</p> <p>60 °C</p> <p>0 °C</p> <p>40 °C</p>
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> • Installation altitude above sea level, max. 	3 000 m
Dimensions	
Width	40 mm
Height	125 mm
Depth	117 mm
Weights	
Weight, approx.	360 g

	Version	Classification
eClass	14	27-24-26-08
eClass	12	27-24-26-08
eClass	9.1	27-24-26-08
eClass	9	27-24-26-08
eClass	8	27-24-26-08
eClass	7.1	27-24-26-08
eClass	6	27-24-26-08
ETIM	10	EC001604
ETIM	9	EC001604
ETIM	8	EC001604
ETIM	7	EC001604
IDEA	4	3564
UNSPSC	15	32-15-17-05

Approvals / Certificates	
General Product Approval	For use in hazardous locations



[China RoHS](#)

[Manufacturer Declaration](#)



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