



\*\*\* Spare part \*\*\* SIMATIC DP, Electronics module for ET 200S, 2/4 AI RTD Standard, 15 mm width, 15 bit+sign Pt100 STD; Pt100 KL; NI100 STD; NI100 KL; 150 ohm; 300 ohm; 600 ohm; Cycle time 110 ms/channel with SF LED (group fault)

General information	
Product function	
• Isochronous mode	No
Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V; From power module
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	30 mA
from backplane bus 3.3 V DC, max.	10 mA
Output voltage	
Power supply to the transmitters	
• present	Yes
• short-circuit proof	Yes
Power loss	
Power loss, typ.	0.6 W
Address area	
Address space per module	
• Address space per module, max.	8 byte
Analog inputs	
Number of analog inputs	4; 2 for 3 or 4-wire connection
permissible input voltage for voltage input (destruction limit), max.	9 V
Constant measurement current for resistance-type transmitter, typ.	1.67 mA
Cycle time (all channels) max.	Number of active channels per module x basic conversion time
Technical unit for temperature measurement adjustable	No
Input ranges (rated values), resistance thermometer	
• Ni 100	Yes; Standard/climate
— Input resistance (Ni 100)	2 000 kΩ
• Pt 100	Yes; Standard/climate
— Input resistance (Pt 100)	2 000 kΩ
Input ranges (rated values), resistors	
• 0 to 150 ohms	Yes
— Input resistance (0 to 150 ohms)	2 000 kΩ
• 0 to 300 ohms	Yes
— Input resistance (0 to 300 ohms)	2 000 kΩ
• 0 to 600 ohms	Yes
— Input resistance (0 to 600 ohms)	2 000 kΩ

<b>Characteristic linearization</b>		
<ul style="list-style-type: none"> <li>parameterizable</li> <li>— for resistance thermometer</li> </ul>	Yes; for Pt100, Ni100 Pt100 (standard, climatic range), Ni100 (standard, climatic range)	
<b>Cable length</b>		
<ul style="list-style-type: none"> <li>shielded, max.</li> </ul>	200 m	
<b>Analog value generation for the inputs</b>		
Measurement principle	integrating	
<b>Integration and conversion time/resolution per channel</b>		
<ul style="list-style-type: none"> <li>Resolution with overrange (bit including sign), max.</li> <li>Integration time, parameterizable</li> <li>Integration time (ms)</li> <li>Interference voltage suppression for interference frequency <math>f_1</math> in Hz</li> <li>Conversion time (per channel)</li> </ul>	16 bit; 150 ohms: 14 bit; 300, 600 ohms: 15 bit, Pt100, Ni100: 16 bit Yes 16,7 / 20 ms 50 / 60 Hz 66 / 80 ms; additional conversion time for diagnostic wire break test	
<b>Smoothing of measured values</b>		
<ul style="list-style-type: none"> <li>parameterizable</li> <li>Step: None</li> <li>Step: low</li> <li>Step: Medium</li> <li>Step: High</li> </ul>	Yes; In four stages by means of digital filtering Yes; 1x cycle time Yes; 4x cycle time Yes; 32x cycle time Yes; 64x cycle time	
<b>Encoder</b>		
<b>Connection of signal encoders</b>		
<ul style="list-style-type: none"> <li>for resistance measurement with two-wire connection</li> <li>for resistance measurement with three-wire connection</li> <li>for resistance measurement with four-wire connection</li> </ul>	Yes Yes Yes	
<b>Errors/accuracies</b>		
<b>Operational error limit in overall temperature range</b>		
<ul style="list-style-type: none"> <li>Resistance thermometer, relative to input range, (+/-)</li> </ul>	0.6 %	
<b>Basic error limit (operational limit at 25 °C)</b>		
<ul style="list-style-type: none"> <li>Resistance thermometer, relative to input range, (+/-)</li> </ul>	0.4 %	
<b>Interrupts/diagnostics/status information</b>		
<b>Diagnoses</b>		
<ul style="list-style-type: none"> <li>Wire break</li> <li>Group error</li> <li>Overflow/Underflow</li> </ul>	Yes Yes Yes	
<b>Diagnostics indication LED</b>		
<ul style="list-style-type: none"> <li>Group error SF (red)</li> </ul>	Yes	
<b>Parameter</b>		
Diagnostics wire break	Disable / enable	
Group diagnostics	Disable / enable	
Overflow/Underflow	Disable / enable	
<b>Potential separation</b>		
<b>Potential separation analog inputs</b>		
<ul style="list-style-type: none"> <li>between the channels</li> <li>between the channels and backplane bus</li> <li>Between the channels and load voltage L+</li> </ul>	No Yes Yes	
<b>Isolation</b>		
Isolation tested with	500 V DC	
<b>Dimensions</b>		
Width	15 mm	
Height	81 mm	
Depth	52 mm	
<b>Weights</b>		
Weight, approx.	40 g	
<b>Classifications</b>		
	<b>Version</b>	<b>Classification</b>
eClass	14	27-24-26-01
eClass	12	27-24-26-01

eClass	9.1	27-24-26-01
eClass	9	27-24-26-01
eClass	8	27-24-26-01
eClass	7.1	27-24-26-01
eClass	6	27-24-26-01
ETIM	10	EC001596
ETIM	9	EC001596
ETIM	8	EC001596
ETIM	7	EC001596
IDEA	4	3562
UNSPSC	15	32-15-17-05

**Approvals / Certificates**

**General Product Approval**



[Miscellaneous](#)

[Manufacturer Declaration](#)



[Metrological Approval](#)

**General Product Approval**

**EMV**



[China RoHS](#)



**For use in hazardous locations**



[EM](#)



**For use in hazardous locations**

**Maritime application**

[Miscellaneous](#)

[CCC-Ex](#)



**Maritime application**

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[CCS \(China Classification Society\)](#)

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