

SIMATIC ET 200SP, Analog output module, AQ 2xI Standard, Pack quantity: 1 unit, suitable for BU type A0, A1, Color code CC00, Module diagnostics, 16 bit



General information	
Product type designation	AQ 2xI ST
HW functional status	From FS03
Firmware version	
<ul style="list-style-type: none"> FW update possible 	Yes
usable BaseUnits	BU type A0, A1
Color code for module-specific color identification plate	CC00
Product function	
<ul style="list-style-type: none"> I&M data 	Yes; I&M0 to I&M3
<ul style="list-style-type: none"> Output range scalable 	No
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated as of version 	V13 SP1 / -
<ul style="list-style-type: none"> STEP 7 configurable/integrated as of version 	V5.5 SP3 / -
<ul style="list-style-type: none"> PROFIBUS as of GSD version/GSD revision 	GSD Revision 5
<ul style="list-style-type: none"> PROFINET as of GSD version/GSD revision 	GSDML V2.3
Operating mode	
<ul style="list-style-type: none"> Oversampling 	No

- MSO

No

CiR – Configuration in RUN

Reparameterization possible in RUN Yes

Calibration possible in RUN No

Supply voltage

Rated value (DC) 24 V

permissible range, lower limit (DC) 19.2 V

permissible range, upper limit (DC) 28.8 V

Reverse polarity protection Yes

Input current

Current consumption, max. 110 mA

Power loss

Power loss, typ. 1.5 W

Address area

Address space per module

- Address space per module, max. 4 byte; + 1 byte for QI information

Analog outputs

Number of analog outputs 2

Cycle time (all channels), min. 1 ms

Analog output with oversampling No

Output ranges, current

- 0 to 20 mA Yes; 15 bit
- -20 mA to +20 mA Yes; 16 bit incl. sign
- 4 mA to 20 mA Yes; 14 bit

Connection of actuators

- for current output two-wire connection Yes

Load impedance (in rated range of output)

- with current outputs, max. 500 Ω
- with current outputs, inductive load, max. 1 mH

Destruction limits against externally applied voltages and currents

- Voltages at the outputs 30 V

Cable length

- shielded, max. 1 000 m

Analog value generation for the outputs

Integration and conversion time/resolution per channel

- Resolution with overrange (bit including sign), max. 16 bit

Settling time

- for resistive load 0.1 ms; Typical value
- for inductive load 0.5 ms

Errors/accuracies	
Linearity error (relative to output range), (+/-)	0.03 %
Temperature error (relative to output range), (+/-)	0.005 %/K
Crosstalk between the outputs, min.	-50 dB
Repeat accuracy in steady state at 25 °C (relative to output range), (+/-)	0.05 %
Operational error limit in overall temperature range	
• Voltage, relative to output range, (+/-)	0.5 %
• Current, relative to output range, (+/-)	0.5 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to output range, (+/-)	0.3 %
• Current, relative to output range, (+/-)	0.3 %
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• Monitoring the supply voltage	Yes
• Wire-break	Yes
• Group error	Yes
• Overflow/underflow	Yes
Diagnostics indication LED	
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• Channel status display	Yes; green LED
• for channel diagnostics	No
• for module diagnostics	Yes; green/red DIAG LED
Potential separation	
Potential separation channels	
• between the channels	No
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	-30 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	-30 °C

• vertical installation, max. 50 °C

Altitude during operation relating to sea level

• Installation altitude above sea level, max. 2 000 m; On request: Installation altitudes greater than 2 000 m

Dimensions

Width 15 mm

Height 73 mm

Depth 58 mm

Weights

Weight, approx. 31 g

last modified: 05/13/2020