



Main

Range of product	Modicon M340 automation platform
Product or component type	Analog input module
Electrical connection	1 connector 40 ways
Input output isolation	Isolated
Input level	Low level
Analogue input number	4
Analogue input type	Voltage +/- 1.28 V Voltage +/- 160 mV Voltage +/- 320 mV Voltage +/- 40 mV Voltage +/- 640 mV Voltage +/- 80 mV Resistor 400 Ohm 2 wires Resistor 400 Ohm 3 wires Resistor 400 Ohm 4 wires Resistor 4000 Ohm 2 wires Resistor 4000 Ohm 3 wires Resistor 4000 Ohm 4 wires Temperature probe -100...+260 °C Cu 10 Temperature probe -100...+450 °C Pt 100 UL/JIS Temperature probe -100...+450 °C Pt 1000 UL/JIS Temperature probe -200...+850 °C Pt 100 IEC Temperature probe -200...+850 °C Pt 1000 IEC Temperature probe -60...+180 °C Ni 100 Temperature probe -60...+180 °C Ni 1000 Thermocouple +130...+1820 °C thermocouple B Thermocouple +270...+1300 °C thermocouple N Thermocouple -200...+600 °C thermocouple U Thermocouple -200...+760 °C thermocouple J Thermocouple -200...+900 °C thermocouple L Thermocouple -270...+1000 °C thermocouple E Thermocouple -270...+1370 °C thermocouple K Thermocouple -270...+400 °C thermocouple T Thermocouple -50...+1769 °C thermocouple R Thermocouple -50...+1769 °C thermocouple S

Complementary

Analog/digital conversion	Sigma delta 16 bits
Analogue input resolution	15 bits + sign
Input impedance	10 MOhm
Permitted overload on inputs	+/- 7.5 V +/- 1.28 V +/- 7.5 V +/- 160 mV +/- 7.5 V +/- 320 mV +/- 7.5 V +/- 40 mV +/- 7.5 V +/- 640 mV +/- 7.5 V +/- 80 mV
Common mode rejection	120 dB 50/60 Hz
Differential mode rejection	60 dB 50/60 Hz
Cold junction compensation	External by Pt100 probe
Type of filter	First order digital filtering
Nominal read cycle time	200 ms with thermocouple 400 ms with temperature probe
Measurement error	+/- 0.7 °C Ni 1000 25 °C +/- 1.3 °C Ni 1000 0...60 °C +/- 2 °C Pt 100 0...60 °C +/- 2 °C Pt 1000 0...60 °C +/- 2.1 °C Ni 100 25 °C +/- 2.1 °C Pt 100 25 °C +/- 2.1 °C Pt 1000 25 °C

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+/- 2.7 °C thermocouple U 25 °C
 +/- 2.8 °C thermocouple J 25 °C
 +/- 3 °C Ni 100 0...60 °C
 +/- 3 °C thermocouple L 25 °C
 +/- 3.2 °C thermocouple R 25 °C
 +/- 3.2 °C thermocouple S 25 °C
 +/- 3.5 °C thermocouple B 25 °C
 +/- 3.7 °C thermocouple E 25 °C
 +/- 3.7 °C thermocouple K 25 °C
 +/- 3.7 °C thermocouple N 25 °C
 +/- 3.7 °C thermocouple T 25 °C
 +/- 4 °C Cu 10 0...60 °C
 +/- 4 °C Cu 10 25 °C
 +/- 4.5 °C thermocouple J 0...60 °C
 +/- 4.5 °C thermocouple L 0...60 °C
 +/- 4.5 °C thermocouple R 0...60 °C
 +/- 4.5 °C thermocouple S 0...60 °C
 +/- 4.5 °C thermocouple U 0...60 °C
 +/- 5 °C thermocouple B 0...60 °C
 +/- 5 °C thermocouple E 0...60 °C
 +/- 5 °C thermocouple K 0...60 °C
 +/- 5 °C thermocouple N 0...60 °C
 +/- 5 °C thermocouple T 0...60 °C
 <= 0.15 % of full scale +/- 1.28 V 0...60 °C
 <= 0.15 % of full scale +/- 160 mV 0...60 °C
 <= 0.15 % of full scale +/- 320 mV 0...60 °C
 <= 0.15 % of full scale +/- 40 mV 0...60 °C
 <= 0.15 % of full scale +/- 640 mV 0...60 °C
 <= 0.15 % of full scale +/- 80 mV 0...60 °C
 <= 0.2 % of full scale 400 Ohm 0...60 °C
 <= 0.2 % of full scale 4000 Ohm 0...60 °C
 0.05 % of full scale +/- 1.28 V 25 °C
 0.05 % of full scale +/- 160 mV 25 °C
 0.05 % of full scale +/- 320 mV 25 °C
 0.05 % of full scale +/- 40 mV 25 °C
 0.05 % of full scale +/- 640 mV 25 °C
 0.05 % of full scale +/- 80 mV 25 °C
 0.12 % of full scale 400 Ohm 25 °C
 0.12 % of full scale 4000 Ohm 25 °C

Temperature drift

25 ppm/°C 400 Ohm
 25 ppm/°C 4000 Ohm
 25 ppm/°C Ni 1000
 25 ppm/°C thermocouple B
 25 ppm/°C thermocouple E
 25 ppm/°C thermocouple J
 25 ppm/°C thermocouple K
 25 ppm/°C thermocouple L
 25 ppm/°C thermocouple N
 25 ppm/°C thermocouple R
 25 ppm/°C thermocouple S
 25 ppm/°C thermocouple T
 25 ppm/°C thermocouple U
 30 ppm/°C +/- 1.28 V
 30 ppm/°C +/- 160 mV
 30 ppm/°C +/- 320 mV
 30 ppm/°C +/- 40 mV
 30 ppm/°C +/- 640 mV
 30 ppm/°C +/- 80 mV
 30 ppm/°C Cu 10
 30 ppm/°C Ni 100
 30 ppm/°C Pt 100
 30 ppm/°C Pt 1000

Recalibration

Internal

Isolation voltage

1400 V DC between channels and bus
 750 V DC between channels
 750 V DC between channels and ground

Detection type

Open circuit Cu 10
 Open circuit Ni 100
 Open circuit Ni 1000
 Open circuit Pt 100
 Open circuit Pt 1000
 Open circuit thermocouple B
 Open circuit thermocouple E
 Open circuit thermocouple J
 Open circuit thermocouple K
 Open circuit thermocouple L
 Open circuit thermocouple N
 Open circuit thermocouple R

Open circuit thermocouple S
 Open circuit thermocouple T
 Open circuit thermocouple U

Maximum wiring resistance	20 Ohm 2 wires Cu 10 20 Ohm 2 wires Ni 100 20 Ohm 2 wires Pt 100 20 Ohm 3 wires Cu 10 20 Ohm 3 wires Ni 100 20 Ohm 3 wires Pt 100 200 Ohm 2 wires Ni 1000 200 Ohm 2 wires Pt 1000 200 Ohm 3 wires Ni 1000 200 Ohm 3 wires Pt 1000 50 Ohm 4 wires Cu 10 50 Ohm 4 wires Ni 100 50 Ohm 4 wires Pt 100 500 Ohm 4 wires Ni 1000 500 Ohm 4 wires Pt 1000
Measurement resolution	0.1 °C Cu 10 0.1 °C Ni 100 0.1 °C Ni 1000 0.1 °C Pt 100 0.1 °C Pt 1000 0.1 °C thermocouple B 0.1 °C thermocouple E 0.1 °C thermocouple J 0.1 °C thermocouple K 0.1 °C thermocouple L 0.1 °C thermocouple N 0.1 °C thermocouple R 0.1 °C thermocouple S 0.1 °C thermocouple T 0.1 °C thermocouple U 1280/2exp14 mV +/- 1.28 V 160/2exp14 mV +/- 160 mV 320/2exp14 mV +/- 320 mV 40/2exp14 mV +/- 40 mV 40/2exp14 mV 400 Ohm 4000/2exp14 mV 4000 Ohm 640/2exp14 mV +/- 640 mV 80/2exp14 mV +/- 80 mV
Maximum conversion value	+/- 100 % 400 Ohm +/- 100 % 4000 Ohm +/- 102.5 % +/- 1.28 V +/- 102.5 % +/- 160 mV +/- 102.5 % +/- 320 mV +/- 102.5 % +/- 40 mV +/- 102.5 % +/- 640 mV +/- 102.5 % +/- 80 mV
Status LED	1 LED green RUN 1 LED per channel green channel diagnostic 1 LED red ERR 1 LED red I/O
Product weight	0.135 kg
Current consumption	40 mA at 24 V DC 150 mA at 3.3 V DC

Environment

Ambient air temperature for operation	0...60 °C
Relative humidity	10...95 % without condensation
IP degree of protection	IP20
Protective treatment	TC

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0722 - Schneider Electric declaration of conformity
REACH	Reference contains SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations

