Product data sheet
Characteristics

NTSAMI0210HK
Analog Input Module + Base, 2 Isolated In, Current, Voltage, 2/3/4 wires, Loop Power, Hardened, Modicon Edge I/O NTS



Main

Range of product	Modicon Edge I/O NTS
Product or component type	Analog input module
Kit composition	NTSAMI0210H module NTSXBA0200H base
Mandatory accessory	NTSXTB12_0_H terminal block
Product compatibility	NTSN.....
Range compatibility	Logic/Motion controller - Modicon M262 Modicon M580 Third party
Device application	Industrial application
Analogue input number	2
Operating mode	Synchronous/Isochronous/Asynchronous

Complementary

Analogue input type	Current +/- 20 mA Current 0...20 mA Current 4...20 mA Voltage +/- 10 V Voltage 0...10 V Voltage +/- 5 V Voltage 0...5 V Voltage 1...5 V
Input wiring mode	2, 3 or 4 wires
Analogue input resolution	15 bits + sign
Permitted overload on inputs	30 V maximum voltage 30 V at 50 mA maximum current
Input impedance	> 10 MOhm in voltage mode 250 Ohm + internal current protector 10 Ohm typical
Sampling duration	0.499 Ms
Input protection type	Over current / miswiring protection per channel for current input Over voltage / miswiring protection per channel for voltage input
Sensor power supply protection	Over current protection per channel Short circuit protection on loop power supply per channel
Input diagnostic	Underflow error per channel Overflow error per channel Broken wire error per channel Hardware error per channel Calibration error per channel Loop power supply error per channel

LSB value	0.31 mV, +/- 10 V 0.31 mV, 0...10 V 0.16 mV, +/- 5 V 0.16 mV, 0...5 V 0.13 mV, 1...5 V 0.61 µA, +/- 20 mA 0.61 µA, 0...2 mA 0.49 µA, 4...20 mA
HART tolerance	Yes
Type of cable	Shielded cable
Temperature drift	± 0.001 % FS/ °C
Measurement error	<= 0.05 % FS 25 °C <= 0.1 % FS - 20…60 °C
Non-linearity	<= 0.01 % FS, analogue input type: voltage/current
Common mode rejection	90 dB
Sensor power supply	19.2…30 V DC sensor power supply 24 V DC Loop power
Power supply type	Bus power from power supply bus (24 Vdc) Field power from power supply field (24 Vdc)
Rated operational voltage limits	20.4...28.8 V DC
Typical current consumption	36 MA at 24 V DC on the Bus current 38.4 MA at 24 V DC on the internal field current minimum 246.1 MA at 24 V DC on the internal field current maximum
Power dissipation in W	1.9 W maximum at 24 V DC
Maximum cable distance between devices	Shielded cable: <200 m for voltage inputs Shielded cable: <1000 m for current input
Isolation between channels	530 V AC
Isolation between channels and bus	1500 V AC
Isolation between channels and field pwr	No for module sensor power supply 1000 Vac for module loop power supply
Isolation between field power and bus	1500 V AC
Hot swapping fallback	Yes
Local signalling	1 LED green for module operating (RUN) 1 LED per channel green for channel diagnostic 1 LED red for module error (ERR)
Housing colour	Grey
Mounting support	Top hat type TH35-7.5 rail conforming to IEC 60715 Top hat type TH35-15 rail conforming to IEC 60715
Height	100 Mm
Width	30 Mm
Depth	80 Mm
Net weight	0.125 Kg

Environment

IP degree of protection	IP20
Protective treatment	Conformal coating
Marking	CE UKCA CULus RCM
Product certifications	CE[RETURN]UKCA[RETURN]CULus[RETURN]RCM[RETURN]Merchant Navy - EU RO MR (pen
Standards	EN/IEC 61131-2 EN 61010-2-201 UL 61010-2-201 IACS E10 EN/IEC 61000-6-5 EN/IEC 61850-3 EN/IEC 60079-0 EN 50155 EN 50121-4 EN 50121-5
Directives	2014/30/EU - electromagnetic compatibility 2014/34/EU - ATEX directive 2014/35/EU
Ambient air temperature for operation	-40…70 °C

Ambient air temperature for storage	-40…85 °C
Relative humidity	5…95 % without condensation
Operating altitude	0...2000 m 2000...5000 m with derating
Pollution degree	2
Environmental characteristic	Gas resistant CX & GX combined Salt spray resistant
Vibration resistance	1 g without accessory 2 g with accessory
Shock resistance	15 g for 11 ms (with and without accessory)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.800 Cm
Package 1 Width	12.000 Cm
Package 1 Length	8.900 Cm
Package 1 Weight	148.000 G

Offer Sustainability

Recyclability potential, in %	0
Total lifecycle Carbon footprint	30 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	9.616318247901853
Carbon footprint of the manufacturing phase [A1 to A3]	10 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.19421634948392016
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.00030090781799237874
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	20.211086378297914
Carbon footprint of the use phase [B2, B3, B4, B6]	20 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.375580025860564
Carbon footprint of the end-of-life phase [C1 to C4]	0.4 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	30
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	66dc73d1-d186-4343-b24e-84507e018951
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
End of life manual availability	End Of Life Information
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised