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Eight MINI Analog Pro signal conditioners and measuring transducers can be quickly and easily integrated into a Modbus/RTU network via a communication adapter.

Product Description

Thanks to its innovative plug-in concept, the communication adapter offers a time-saving wiring solution. Eight MINI Analog Pro signal converters can be quickly and easily integrated into a Modbus/RTU network using a communication adapter. Flexible signal combinations and eliminating the need for I/O input cards saves space and money in the control cabinet.



Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 997119
GTIN	4046356997119
Weight per Piece (excluding packing)	199.000 g
Custom tariff number	85389099
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Note

	Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
	Dimensions	

Width	51.1 mm
Height	104.1 mm
Depth	56.8 mm

Supply

Nominal supply voltage range	12 V 24 V



Technical data

Supply

Supply voltage range	9.6 V 30 V
Typical current consumption	110 mA (at 9.6 V DC)
Power consumption	< 1000 mW

Input data

Available input sources	floating switch contact
	Current source
Number of inputs	8
Configurable/programmable	Yes
Current input signal	4 mA 20 mA
Maximum input current	24 mA
Input resistance current input	50 Ω
Maximum input voltage	5 V

Output data

Number of outputs	1
Configurable/programmable	Yes
Transmission speed	1.2 kbps
	2.4 kbps
	4.8 kbps
	9.6 kbps
	19.2 kbps
	38.4 kbps
	57.6 kbps
	115.2 kbps
Data update rate	15 ms

General

Maximum transmission error	0.1 %
Maximum temperature coefficient	0.01 %
Degree of protection	IP20 (Finger safety)
Overvoltage category	II
Degree of pollution	2
Rated insulation voltage	50 V _{rms}
Test voltage, input/output/supply	0.5 kV
Status display	Green LED
Indication	Red LED
Housing material	PBT 7% GF V0
Mounting position	any

Connection data

Connection name	Output
Connection method	D-SUB socket strip



Technical data

Connection data

Number of positions	9
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Ambient conditions

Ambient temperature (operation)	-40 °C 65 °C
Ambient temperature (storage/transport)	-40 °C 70 °C
Permissible humidity (operation)	5 % 95 %
Permissible humidity (storage/transport)	5 % 95 %
Maximum altitude	4000 m

Standards and Regulations

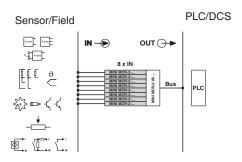
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Conformance	CE-compliant
UL, USA/Canada	UL 61010 Listed
	Class I, Div. 2, Groups A, B, C, D T5
	Class I, Zone 2, Group IIC T5
GL	GL applied for

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Block diagram



Classifications

eCl@ss

eCl@ss 5.1	27242608
eCl@ss 6.0	27242608
eCl@ss 7.0	27242608
eCl@ss 8.0	27242608
eCl@ss 9.0	27242608



Classifications

ETIM

ETIM 3.0	EC001604
ETIM 4.0	EC001604
ETIM 5.0	EC001604
ETIM 6.0	EC001604

UNSPSC

	1
UNSPSC 13.2	32151602
01101 00 10.2	02101002

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 238705

CUL Listed cUL Listed http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 238705

EAC RU C-DE.A*30.B.01082

cULus Listed CULus Listed

Accessories

Accessories

Device marking



Accessories

Marker for end clamp - UCT-EM (30X5) - 0801505



Marker for end clamp, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, mounting type: snapped into marker carrier, lettering field size: 30 x 5 mm

Marker for end clamp - UCT-EM (30X5) YE - 0830340



Marker for end clamp, Sheet, yellow, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, mounting type: snapped into marker carrier, lettering field size: 30 x 5 mm

Plastic label - UC-EMLP (15X5) - 0819301



Plastic label, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: adhesive, lettering field size: 15 x 5 mm

Plastic label - UC-EMLP (15X5) YE - 0822615



Plastic label, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: adhesive, lettering field size: 15 x 5 mm

Plastic label - UC-EMLP (15X5) SR - 0828095



Plastic label, Sheet, silver, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: adhesive, lettering field size: 15 x 5 mm



Accessories

Plastic label - US-EMLP (15X5) - 0828790



Plastic label, Card, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, mounting type: adhesive, lettering field size: 15 x 5 mm

Plastic label - US-EMLP (15X5) YE - 0828873



Plastic label, Card, yellow, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, mounting type: adhesive, lettering field size: 15 x 5 mm

Plastic label - US-EMLP (15X5) SR - 0828874



Plastic label, Card, silver, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, mounting type: adhesive, lettering field size: 15 x 5 mm

DIN rail connector

DIN rail bus connectors - ME 6,2 TBUS-2 1,5/5-ST-3,81 GN - 2869728



DIN rail connector for DIN rail mounting. Universal for TBUS housing. Gold-plated contacts, 5-pos.

Evaluation unit

Monitoring module - MINI MCR-2-FM-RC - 2904504



Fault monitoring module with plug-in connection technology for evaluating and reporting group errors from the FM system and for monitoring the supply voltages. Error message via N/C contact. Screw connection technology, standard configuration



Accessories

Monitoring module - MINI MCR-2-FM-RC-PT - 2904508



Fault monitoring module with plug-in connection technology for evaluating and reporting group errors from the FM system and for monitoring the supply voltages. Error message via N/C contact. Push-in connection technology, standard configuration

Monitoring module - MINI MCR-2-FM-RC - 2904504



Fault monitoring module with plug-in connection technology for evaluating and reporting group errors from the FM system and for monitoring the supply voltages. Error message via N/C contact. Screw connection technology, standard configuration

Monitoring module - MINI MCR-2-FM-RC-PT - 2904508



Fault monitoring module with plug-in connection technology for evaluating and reporting group errors from the FM system and for monitoring the supply voltages. Error message via N/C contact. Push-in connection technology, standard configuration

Feed-through terminal block

Feed-through terminal block - MINI MCR-2-TB - 2902068



Feed-through terminal block with plug-in connection technology for the transmission of signals already electrically isolated. Screw connection technology

Feed-through terminal block - MINI MCR-2-TB - 2902068



Feed-through terminal block with plug-in connection technology for the transmission of signals already electrically isolated. Screw connection technology

Frequency transducer



Accessories

Frequency transducer - MINI MCR-2-UI-FRO-PT - 2902032



Analog frequency transducer with limit value functionality and plug-in connection technology for converting standard signals into frequency or PWM signals. Configurable via DIP switch or software. Push-in connection technology, standard configuration.

Frequency transducer - MINI MCR-2-UI-FRO - 2902031



Analog frequency transducer with limit value functionality and plug-in connection technology for converting standard signals into frequency or PWM signals. Configurable via DIP switch or software. Screw connection technology, standard configuration.

Frequency transducer - MINI MCR-2-UI-FRO-PT-C - 2906202



Analog frequency transducer with limit value functionality and plug-in connection technology for converting standard signals into frequency or PWM signals. Configurable via DIP switch or software. Push-in connection technology, order configuration.

Frequency transducer - MINI MCR-2-UI-FRO-C - 2906201



Analog frequency transducer with limit value functionality and plug-in connection technology for converting standard signals into frequency or PWM signals. Configurable via DIP switch or software. Screw connection technology, order configuration.

Frequency transducer - MINI MCR-2-F-UI - 2902056



Universally configurable frequency transducer for converting frequency and PWM signals into standard signals. Sensor voltages greater than 8.2 V DC are possible in combination with MINI MCR-2-SPS 1033202. Screw connection technology.



Accessories

Frequency transducer - MINI MCR-2-F-UI-PT - 2902058



Universally configurable frequency transducer for converting frequency and PWM signals into standard signals. Sensor voltages greater than 8.2 V DC are possible in combination with MINI MCR-2-SPS-PT 1033201. Push-in connection technology.

Isolating switch transf.

Isolation amplifier - MINI MCR-2-NAM-2RO-PT - 2902005



Configurable NAMUR signal conditioner with plug-in connection technology for proximity sensors, floating switch contacts, and switch contacts with resistance circuit. 2 transistor outputs. Configurable via DIP switch. Push-in connection technology.

Isolation amplifier - MINI MCR-2-NAM-2RO - 2902004



Configurable NAMUR signal conditioner with plug-in connection technology for proximity sensors, floating switch contacts, and switch contacts with resistance circuit. 2 transistor outputs, configurable via DIP switch. Screw connection technology.

Labeled device marker

Marker for end clamp - UCT-EM (30X5) CUS - 0801589



Marker for end clamp, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 30 x 5 mm

Marker for end clamp - UCT-EM (30X5) YE CUS - 0830348



Marker for end clamp, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 30 x 5 mm



Accessories

Plastic label - UC-EMLP (15X5) CUS - 0824550



Plastic label, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm

Plastic label - UC-EMLP (15X5) YE CUS - 0824551



Plastic label, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm

Plastic label - UC-EMLP (15X5) SR CUS - 0828099



Plastic label, can be ordered: by sheet, silver, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm

Plastic label - US-EMLP (15X5) CUS - 0830076



Plastic label, can be ordered: By card, white, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm

Plastic label - US-EMLP (15X5) YE CUS - 0830077



Plastic label, can be ordered: By card, yellow, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm



Accessories

Plastic label - US-EMLP (15X5) SR CUS - 0830078



Plastic label, can be ordered: By card, silver, labeled according to customer specifications, mounting type: adhesive, lettering field size: 15 x 5 mm

Potiposition transducer

Resistance/potiposition transducer - MINI MCR-2-POT-UI-PT - 2902017



Configurable potiposition transducer with plug-in connection technology for connecting potentiometers from 0 Ω ... 100 Ω to 0 k Ω ... 100 k Ω . Configurable via DIP switch or software. push-in connection technology, standard configuration

Resistance/potiposition transducer - MINI MCR-2-POT-UI - 2902016



Configurable potiposition transducer with plug-in connection technology for connecting potentiometers from 0 Ω ... 100 Ω to 0 k Ω ... 100 k Ω . Configurable via DIP switch or software. Screw connection technology, standard configuration

Resistance/potiposition transducer - MINI MCR-2-POT-UI-PT-C - 2905006



Configurable potiposition transducer with plug-in connection technology for connecting potentiometers from 0 Ω ... 100 $\kappa\Omega$... 100 $\kappa\Omega$. Configurable via DIP switch or software. Push-in connection technology, order configuration

Resistance/potiposition transducer - MINI MCR-2-POT-UI-C - 2905005



Configurable potiposition transducer with plug-in connection technology for connecting potentiometers from 0 Ω ... 100 Ω to 0 k Ω ... 100 k Ω . Configurable via DIP switch or software. Screw connection technology, order configuration

Power module



Accessories

Power terminal block - MINI MCR-2-PTB - 2902066



Power terminal with plug-in connection technology for delivering the supply voltage to the DIN rail connector. Monitoring of the supply voltages in combination with the fault monitoring module. Screw connection technology

Power terminal block - MINI MCR-2-PTB-PT - 2902067



Power terminal with plug-in connection technology for delivering the supply voltage to the DIN rail connector. Monitoring of the supply voltages in combination with the fault monitoring module. Push-in connection technology

Programming adapter

Adapter - IFS-BT-PROG-ADAPTER - 2905872



Bluetooth adapter with micro USB and S-PORT interface for wireless communication with the MINI Analog, MINI Analog Pro, MACX Analog, INTERFACE system gateways, and PLC logic device series.

Programming adapter - IFS-USB-PROG-ADAPTER - 2811271



Programming adapter with USB interface, for programming with software. The USB driver is included in the software solutions for the products to be programmed, such as measuring transducers or motor managers.

Programming adapter - TWN4 MIFARE NFC USB ADAPTER - 2909681



Near Field Communication (NFC) programming adapter with USB interface for the wireless configuration of NFC-capable products from PHOENIX CONTACT with software. No separate USB driver is required.

Repeater power supplies



Accessories

Repeater power supply - MINI MCR-2-RPSS-I-I-PT - 2902015



3-way repeater power supply with plug-in connection technology. HART-transparent, input signal 0(4)...20 mA, output signal 0(4)...20 mA. The device can be used in both isolator and repeater power supply operation. push-in connection technology

Repeater power supply - MINI MCR-2-RPSS-I-I - 2902014



3-way repeater power supply with plug-in connection technology. HART-transparent, input signal 0(4)...20 mA, output signal 0(4)...20 mA. The device can be used in both isolator and repeater power supply operation. Screw connection technology

Repeater power supply - MINI MCR-2-RPSS-I-2I-PT - 2905629



4-way power supply doubler with plug-in connection technology. HART transparent, 0(4) ... 20 mA input signal, 0(4)...20 mA output signals. The device can be used in both isolator and repeater power supply mode on active as well as passive analog input cards. Push-in connection technology.

Repeater power supply - MINI MCR-2-RPSS-I-2I - 2905628



4-way power supply doubler with plug-in connection technology. HART transparent, 0(4) ... 20 mA input signal, 0(4)...20 mA output signals. The device can be used in both isolator and repeater power supply mode on active as well as passive analog input cards. Screw connection technology.

Signal conditioner

Signal conditioner - MINI MCR-2-UNI-UI-UIRO-PT - 2902028



Universally configurable 4-way signal conditioner, with switching output and plug-in connection technology for the electrical isolation of analog signals. Configurable via DIP switch or software. Push-in connection technology, standard configuration.



Accessories

Signal conditioner - MINI MCR-2-UNI-UI-UIRO - 2902026



Universally configurable 4-way signal conditioner, with switching output and plug-in connection technology for the electrical isolation of analog signals. Configurable via DIP switch or software. Screw connection technology, standard configuration.

Signal conditioner - MINI MCR-2-UNI-UI-UIRO-PT-C - 2902027



Universally configurable 4-way signal conditioner, with switching output and plug-in connection technology for the electrical isolation of analog signals. Configurable via DIP switch or software. Push-in connection technology, order configuration.

Signal conditioner - MINI MCR-2-UNI-UI-UIRO-C - 2902024



Universally configurable 4-way signal conditioner, with switching output and plug-in connection technology for the electrical isolation of analog signals. Configurable via DIP switch or software. Screw connection technology, order configuration.

Signal conditioner - MINI MCR-2-UI-UI-PT - 2902040



3-way signal conditioner with plug-in connection technology and calibrated measuring range changeover, for the electrical isolation of unipolar and bipolar analog signals. Input/output configurable via DIP switch. push-in connection technology, standard configuration.

Signal conditioner - MINI MCR-2-UI-UI - 2902037



3-way signal conditioner with plug-in connection technology and calibrated measuring range changeover for the electrical isolation of unipolar and bipolar analog signals. Input/output configurable via DIP switch. Screw connection technology, standard configuration.



Accessories

Signal conditioner - MINI MCR-2-UI-UI-PT-C - 2902039



3-way signal conditioner with plug-in connection technology and calibrated measuring range changeover for the electrical isolation of unipolar and bipolar analog signals. Input/output configurable via DIP switch. push-in connection technology, order configuration.

Signal conditioner - MINI MCR-2-UI-UI-C - 2902036



3-way signal conditioner with plug-in connection technology and calibrated measuring range changeover for the electrical isolation of unipolar and bipolar analog signals. Input/output configurable via DIP switch. Screw connection technology, order configuration.

Signal conditioner - MINI MCR-2-U-UI-PT - 2902021



3-way signal conditioner, with configurable input/output, for electrical isolation and conversion of analog signals in the mV and V range, unipolar as well as bipolar. Push-in connection technology, standard configuration.

Signal conditioner - MINI MCR-2-U-UI - 2902019

3-way signal conditioner, with configurable input/output, for electrical isolation and conversion of analog signals in the mV and V range, unipolar as well as bipolar. Screw connection technology, standard configuration.

Signal conditioner - MINI MCR-2-U-I0-PT - 2902023



3-way signal conditioner with plug-in connection technology for the electrical isolation of analog signals. Input signal: $0 \dots 10 \text{ V}$, output signal: $0 \dots 20 \text{ mA}$, push-in connection technology

Signal conditioner - MINI MCR-2-U-I0 - 2902022



3-way signal conditioner with plug-in connection technology for the electrical isolation of analog signals. Input signal: 0 ... 10 V, output signal: 0 ... 20 mA, screw connection technology



Accessories

Signal conditioner - MINI MCR-2-U-I4-PT - 2902030



3-way signal conditioner with plug-in connection technology for the electrical isolation of analog signals. Input signal: 0 ... 10 V, output signal: 4 ... 20 mA, push-in connection technology

Signal conditioner - MINI MCR-2-U-I4 - 2902029



3-way signal conditioner with plug-in connection technology for the electrical isolation of analog signals. Input signal: 0 ... 10 V, output signal: 4 ... 20 mA, screw connection technology

Signal conditioner - MINI MCR-2-I-I-PT - 2901999



3-way signal conditioner with plug-in connection technology for the electrical isolation of analog signals. Input signal: 0(4) mA ... 20 mA, output signal: 0(4) mA ... 20 mA, push-in connection technology.

Signal conditioner - MINI MCR-2-I-I - 2901998



3-way signal conditioner with plug-in connection technology for the electrical isolation of analog signals. Input signal: 0(4) mA ... 20 mA, output signal: 0(4) mA ... 20 mA, screw connection technology

Loop-powered isolators - MINI MCR-2-I-I-ILP-PT - 2901995



Single-channel input loop-powered 2-way isolator with plug-in connection technology for the electrical isolation of analog signals. Input signal = output signal: 0(4) mA ... 20 mA. Push-in connection technology.



Accessories

Loop-powered isolators - MINI MCR-2-I-I-ILP - 2901994



Single-channel input loop-powered 2-way isolator with plug-in connection technology for the electrical isolation of analog signals. Input signal = output signal: 0(4) mA ... 20 mA. Screw connection technology.

Signal duplicator

Signal duplicator - MINI MCR-2-UNI-UI-2UI-PT - 2905028



Universally configurable 4-way signal duplicator, with plug-in connection technology for the electrical isolation and duplication of analog signals. Configurable via DIP switch or software. Push-in connection technology, standard configuration.

Signal duplicator - MINI MCR-2-UNI-UI-2UI - 2905026



Universally configurable 4-way signal duplicator, with plug-in connection technology for the electrical isolation and duplication of analog signals. Configurable via DIP switch or software. Screw connection technology, standard configuration.

Signal duplicator - MINI MCR-2-UNI-UI-2UI-PT-C - 2905027



Universally configurable 4-way signal duplicator, with plug-in connection technology for the electrical isolation and duplication of analog signals. Configurable via DIP switch or software. Push-in connection technology, order configuration.

Signal duplicator - MINI MCR-2-UNI-UI-2UI-C - 2905025



Universally configurable 4-way signal duplicator, with plug-in connection technology for the electrical isolation and duplication of analog signals. Configurable via DIP switch or software. Screw connection technology, order configuration.

Temperature transmitter



Accessories

Resistance thermometer measuring transducer - MINI MCR-2-RTD-UI-PT - 2902052



Configurable temperature transducer with plug-in connection technology for connecting 2, 3, and 4-conductor resistance thermometers and resistance-type sensors. Configurable via DIP switch or software. push-in connection technology, standard configuration

Resistance thermometer measuring transducer - MINI MCR-2-RTD-UI - 2902049



Configurable temperature transducer with plug-in connection technology for connecting 2, 3, and 4-conductor resistance thermometers and resistance-type sensors. Configurable via DIP switch or software. Screw connection technology, standard configuration

Resistance thermometer measuring transducer - MINI MCR-2-RTD-UI-PT-C - 2902051



Configurable temperature transducer with plug-in connection technology for connecting 2, 3, and 4-conductor resistance thermometers and resistance-type sensors. Configurable via DIP switch or software. push-in connection technology, order configuration

Resistance thermometer measuring transducer - MINI MCR-2-RTD-UI-C - 2902048



Configurable temperature transducer with plug-in connection technology for connecting 2, 3, and 4-conductor resistance thermometers and resistance-type sensors. Configurable via DIP switch or software. Screw connection technology, order configuration

Thermocouple measuring transducer - MINI MCR-2-TC-UI-PT - 2905249



Configurable temperature transducer with plug-in connection technology for connecting thermocouples. Configurable via DIP switch or software. Push-in connection technology, standard configuration



Accessories

Thermocouple measuring transducer - MINI MCR-2-TC-UI - 2902055



Configurable temperature transducer with plug-in connection technology for connecting thermocouples. Configurable via DIP switch or software. Screw connection technology, standard configuration

Thermocouple measuring transducer - MINI MCR-2-TC-UI-PT-C - 2905248



Configurable temperature transducer with plug-in connection technology for connecting thermocouples. Configurable via DIP switch or software. Push-in connection technology, order configuration

Thermocouple measuring transducer - MINI MCR-2-TC-UI-C - 2902053



Configurable temperature transducer with plug-in connection technology for connecting thermocouples. Configurable via DIP switch or software. Screw connection technology, order configuration

Terminal marking

Marker strip - SK 5,0 WH:REEL - 0805221



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 5 mm

Threshold value switch

Limit value switches - MINI MCR-2-T-REL-PT - 2905633



Universally configurable temperature limit value switch with N/O relay output for the connection of 2, 3, and 4-conductor resistance thermometers and thermocouples. Configurable via DIP switch or software. Push-in connection technology



Accessories

Limit value switches - MINI MCR-2-T-REL - 2905632



Universally configurable temperature limit value switch with N/O relay output for the connection of 2, 3, and 4-conductor resistance thermometers and thermocouples. Configurable via DIP switch or software, screw connection technology

DIN rail bus connectors - ME 6,2 TBUS-2 1,5/5-ST-3,81 GY - 2695439



DIN rail connector (TBUS), 5-pos., for bridging the supply voltage, can be snapped onto NS 35/... DIN rails according to FN 60715

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