

Absolute-Encoder CMS582 - EtherNet/IP

[Click Here](#) for Quick Delivery Stock Options



Ref.: K-CMS58_2-EIP-1

21.04.2020

010102058202030203

Advantages

- Customer-specific solutions
- Device Level Ring, DLR
- Diagnostics
- Firmware update via TCP
- Fractions for gear factor
- Preset "on the fly"
- Salt-resistant
- Shaft-Ø up to 15 mm
- Speed



General Data

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	10/30 VDC
Nominal current, typically	
- Specific value	90 mA
- Condition	unloaded
Supply	
- In case of UL / CSA approval	according to NEC Class 2
Device design	
- Type	Single-/Multi-Turn
Total resolution	<= 31 Bit
Number of steps per revolution	<= 8192
Number of revolutions	<= 256000
Accuracy	± 0.5 °
EtherNet/IP™ - Interface	
- EtherNet/IP™	IEC 61784-1 CP 2/2, IEC 61158
- Physical Layer	Fast Ethernet, ISO/IEC 8802-3
- Device profile	Encoder Device Profile 0x22
Transmission rate	
- Specific value	100 MBit/s
Parameter/Function, changeable	Resolution
	Limit switch

Subject to change.

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General Data continuation

	Adjustment - Parameter
	Scaling parameter
	Counting direction
	Velocity parameter
Type of parametrization	programmable
Programming - Tool	Fieldbus-Device
Maximum Speed, mechanically	≤ 12000 1/min
Shaft load, axial/radial	Own mass
Bearing life time	$\geq 3.9E+10$ revolutions
Bearing life time - Parameter - Speed	6000 1/min
- Operating temperature	60 °C
Shaft type	
- Shaft diameter [mm]	8
- Shaft diameter [mm]	10
- Shaft diameter [mm]	11
- Shaft diameter [mm]	12
- Shaft diameter [mm]	14
- Shaft diameter [mm]	15
- Shaft diameter ["]	1/4
- Shaft diameter ["]	3/8
- Shaft diameter ["]	1/2
Angular acceleration	$\leq 10E+4$ rad/s ²
Moment of inertia, typically	1.3E-6 kg m ²
Start-up torque, 20 °C	2 Ncm
Concentricity tolerance	± 0.3 mm (static, radial)
Mass, typically	0.3 kg

Environmental conditions

Vibration	DIN EN 60068-2-6
- Specific value	≤ 100 m/s ²
- Sine	50...2000 Hz
Shock	DIN EN 60068-2-27
- Specific value	≤ 1000 m/s ²
- Half sine	11 ms

Subject to change.

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Environmental conditions continuation

Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	-20...+75 °C
- Optional	-40...+75 °C;
Storage temperature, dry	-30...+85 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65
Resistance	
- against salt (seawater)	DIN EN IEC 60068-2-52
- Test method	Test method 1
- excluded are	Attachment parts

Subject to change.

Absolute-Encoder CMS582 - EtherNet/IP

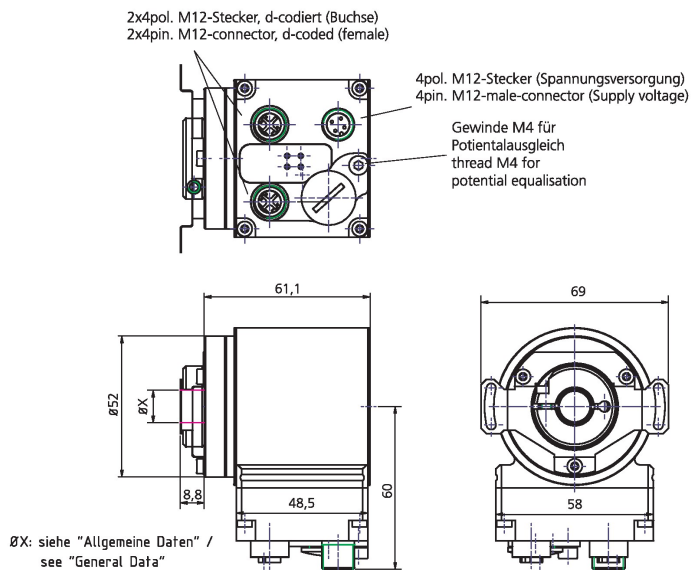
Ref.: K-CMS58_2-EIP-1

21.04.2020

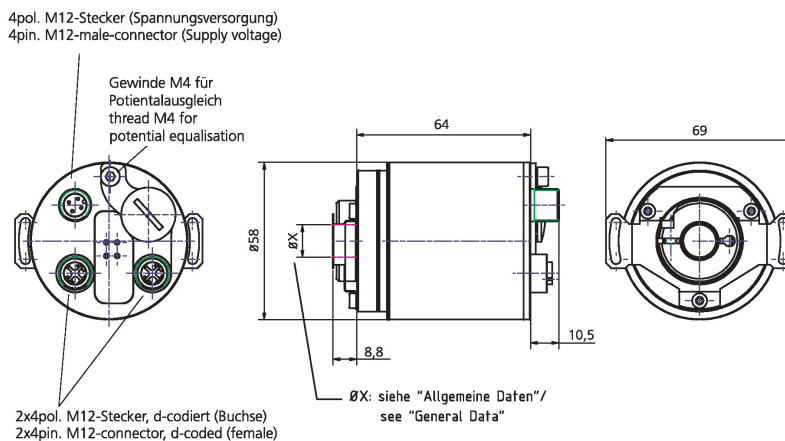
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Dimensional drawing

Radial



Axial



Fehlende Abmaße, siehe Art.-Nr. bezogene Zeichnung /
Missing dimensions, see drawing related to the order number

Subject to change.

Absolute-Encoder CMS582 - EtherNet/IP

Ref.: K-CMS58_2-EIP-1
 21.04.2020
 010102058202030203

Quick Delivery Stock Options (Click Article Number for Data Sheet)

Article Number	Mounting	Shaft	Connector Orientation
<u>CMS582M-00016</u>	Spring Mount	15mm (15H7)	Radial

Add one of the Reducer Collets below to get the shaft bore you need for your application

Part Number	Description
15-12	15mm to 12mm Reducer Collet
15-10	15mm to 10mm Reducer Collet
15-8	15mm to 8mm Reducer Collet
15-6	15mm to 6mm Reducer Collet
15-1/2	15mm to 1/2 Inch Reducer Collet
15-3/8	15mm to 3/8 Inch Reducer Collet
15-1/4	15mm to 1/4 Inch Reducer Collet



Subject to change.

CMS582M*8192/4096 EIP DMS 15H7 KRF

3xM12 radial

[Click Here](#) to go back to Stock Options

Order No.: CMS582M-00016

[Click Here](#) for a Quote - customercare@treletronic.com



Stock photo



Advantages

- _ Customer-specific solutions
- _ Device Level Ring, DLR
- _ Diagnostics
- _ Firmware update via TCP
- _ Fractions for gear factor
- _ Preset "on the fly"
- _ Salt-resistant
- _ Speed

Technical data for CMS582M-00016

NO.OF STEPS/REV	8.192,000
NO. OF REVOLUTIONS	4.096,000
INTERFACE	ETHERNET IP
CODE	PROGRAMABLE
SUPPLY VOLTAGE	10-30V
CONNECTOR TYPE	1X4P.M12-CONNECTOR 2X4P.M12-CONN., D-COD(FEMALE)
CONNECTOR-POSITION	RADIAL
MATING PLUG	NO
SHAFT TYPE	15H7 BLIND SHAFT
TEMPERATURE RANGE	-20+75°C
PROTECTION Class	IP65
OPTIONS ENC	CLAMPING RING ON FLANGE MOMENT SUPPORT SPRING
PINOUT NO.	TR-ECE-TI-DGB-0309
DRAWING NO.	04-CMS582M-M0004
DOCUMENTATION NO	DOKUMENTE
EL:	AL:N
ECCN:	ECCN:N
MTTFd [y] (T=45°C, DC=0) >=	100

Subject to change.

CMS582M*8192/4096 EIP DMS 15H7 KRF

3xM12 radial

Order-#: CMS582M-00016
21.4.2020 / 010102058201030203

Technical data for CMS582M-00016 continuation

UL-APPROVALS

USA+CANADA

General data for K-CMV58_2-EIP-1

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	10/30 VDC
Nominal current, typically	
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- Physical Layer	Fast Ethernet, ISO/IEC 8802-3
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- Specific value	100 MBit/s
Parameter/Function, changeable	Resolution
	Limit switch
	Adjustment - Parameter
	Scaling parameter
	Counting direction
	Velocity parameter
Type of parametrization	programmable
Programming - Tool	Fieldbus-Device
Maximum Speed, mechanically	<= 12000 1/min
Shaft load, axial/radial	<= 50 N, <= 100 N
Bearing life time	>= 3.9E+10 revolutions
Bearing life time - Parameter	
- Speed	6000 1/min
- Operating temperature	60 °C

Subject to change.

CMS582M*8192/4096 EIP DMS 15H7 KRF

3xM12 radial

Order-#: CMS582M-00016
21.4.2020 / 010102058201030203

General data for K-CMV58_2-EIP-1 continuation

- Shaft load, axial/radial	= 60 %
Point of origin, shaft load	Mounting flange + 10 mm
Shaft type	
- Shaft diameter [mm]	6
- Shaft diameter [mm]	8
- Shaft diameter [mm]	10
- Shaft diameter [mm]	12
- Shaft diameter ["]	1/4
- Shaft diameter ["]	3/8
- Shaft diameter ["]	1/2
Angular acceleration	$\leq 10E+4 \text{ rad/s}^2$
Moment of inertia, typically	1.3E-6 kg m ²
Start-up torque, 20 °C	2 Ncm
Mass, typically	0.3 kg

Environmental data

Vibration	DIN EN 60068-2-6
- Specific value	$\leq 100 \text{ m/s}^2$
- Sine	50...2000 Hz
Shock	DIN EN 60068-2-27
- Specific value	$\leq 1000 \text{ m/s}^2$
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	-20...+75 °C
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Storage temperature, dry	-30...+85 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65
Resistance	
- against salt (seawater)	DIN EN IEC 60068-2-52
- Test method	Test method 1
- excluded are	Attachment parts

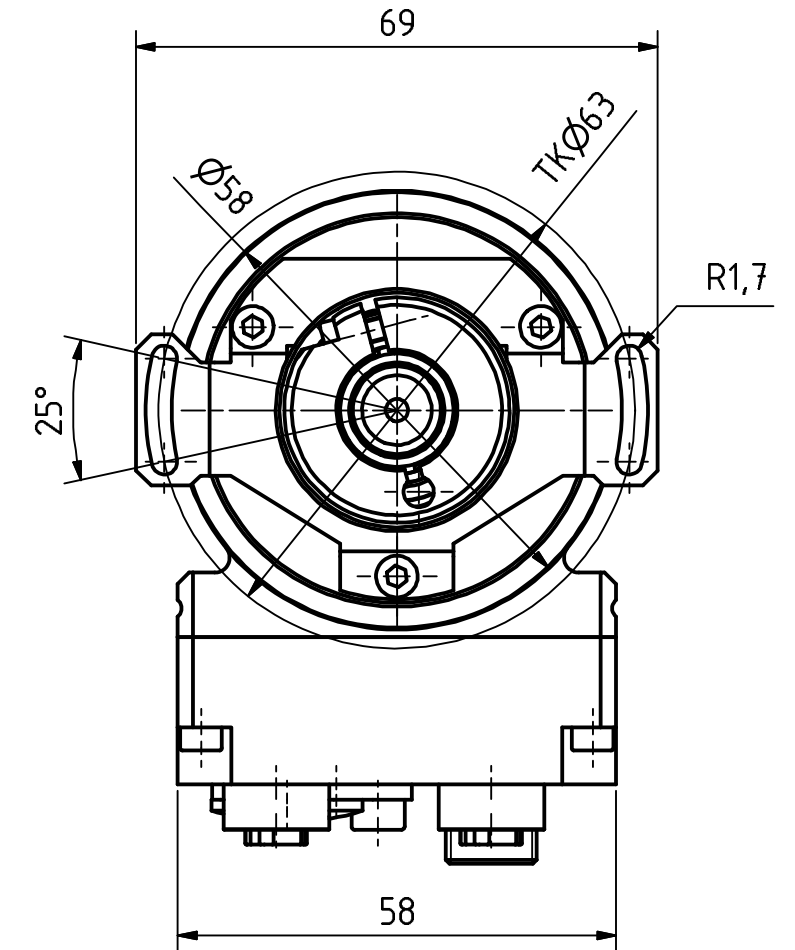
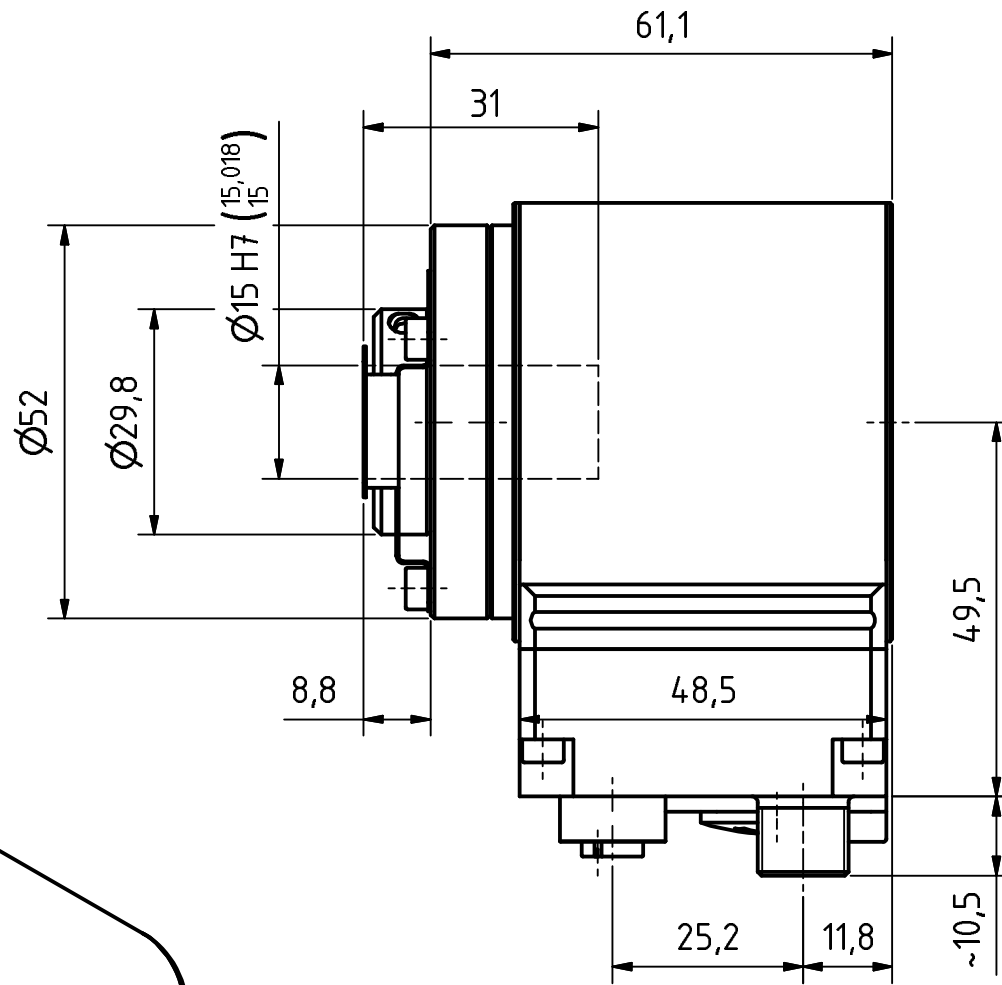
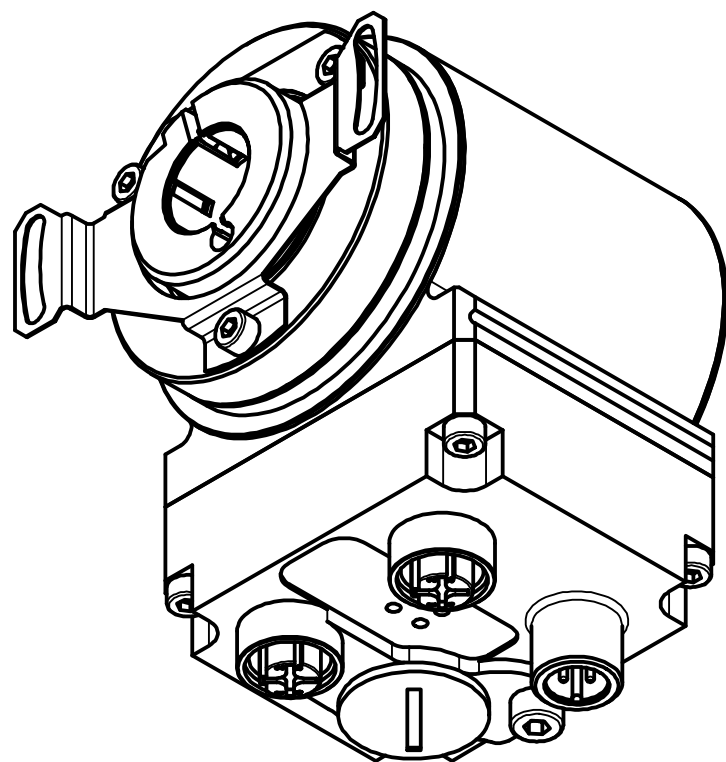
Subject to change.

2x4pol. M12-Stecker, d-codiert (Buchse)
2x4pin. M12-connector, d-coded (female)


4pol. M12-Stecker (Spannungsversorgung)
4pin. M12-male-connector (Supply voltage)

Gewinde M4 für
Potentialausgleich
thread m4 for
potential equalisation

Verschlussstopfen M16x1.5
dummy plug M16x1.5

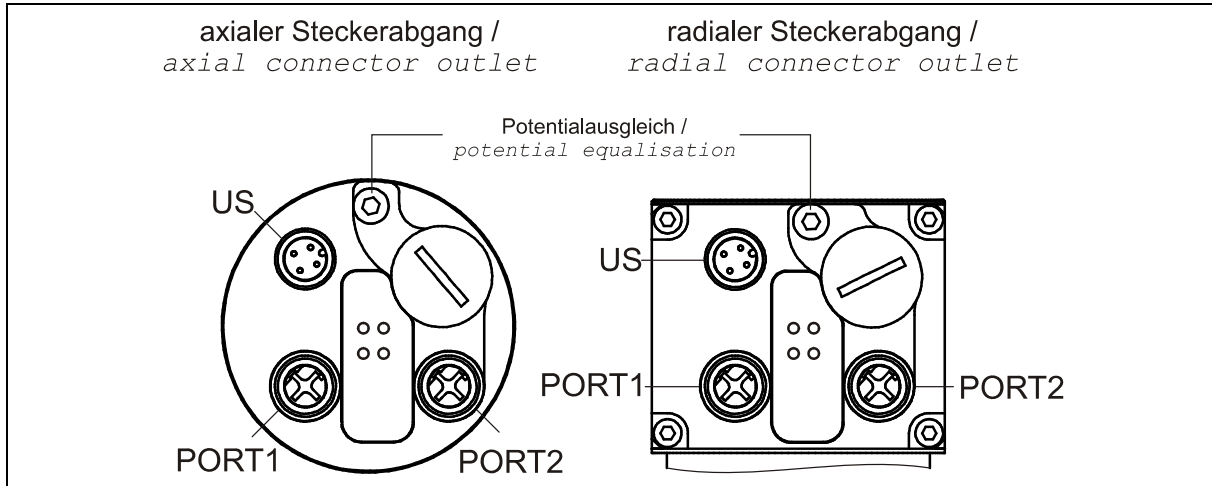


Artikel-Nr. und Steckerbelegung: siehe Datenblatt
Article-No. and pin connections: see data sheet

	TR-Electronic GmbH Eglisshalde 6 D-78647 Trossingen phone +49 7425 228.0 www.tr-electronic.de		Maßstab 1:1 DIN A3	Projekt-Nr.:
	Zeichnungs-Nr. nur für diese Ausführung gültig Drawing-No. only for this type valid		CMS-582-M, Ø15H7	
			Datum	Name
		Erstellt	01.12.2016	FLAIG
		Bearb.	29.06.2017	FLAIG
		Gepr.	29.06.2017	NEMECZ
		Norm		
www.tr-electronic.de DXF+Info: info@tr-electronic.de			Zeichnungs-NR./Drawing-No.: 04-CMS582M-M0004	
1	Bushaube	29.06.17	Flaig	Blatt 1
Zustf.	Änderungen	Datum	Name	1 BU

Steckerbelegung / Pin assignment

Baureihe 582 / 802 / 1102 EtherNet/IP



Die Schirmung ist großflächig auf das Gegensteckergehäuse aufzulegen! /
The shielding is to be connected with large surface on the mating connector housing!

US	Flanschstecker / <i>Male socket</i> (M12x1-4 pol. A-coded)			
1	10 – 30 V DC	Encoder-Versorgungsspannung / <i>Encoder-Supply Voltage</i>		Steckseite <i>Mating Face</i>
2	Darf nicht beschaltet werden! / <i>Do not connect!</i>			
3	0 V	Encoder-Versorgungsspannung / <i>Encoder-Supply Voltage</i>		
4	Darf nicht beschaltet werden! / <i>Do not connect!</i>			

PORT1 / 2		Flanschdose / <i>Female socket</i> (M12x1-4 pol. D-coded)			
1	TxD+	Sendedaten +	<i>Transmission Data +</i>		Steckseite <i>Mating Face</i>
2	RxD+	Empfangsdaten +	<i>Receive Data +</i>		
3	TxD-	Sendedaten -	<i>Transmission Data -</i>		
4	RxD-	Empfangsdaten -	<i>Receive Data -</i>		

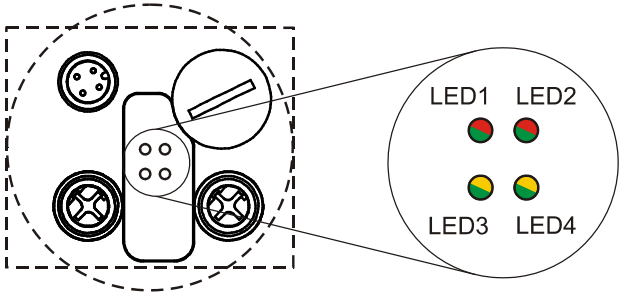
Address:

Schalter / <i>Switches</i>	TCP/IP Object Attr. 3: Config Control	Beschreibung / <i>Description</i>	
		0 = (0x00)	0x00
	0x02	DHCP Anfrage / <i>DHCP request</i>	
1...254 = (0x01...0xFE)	0x00	IP-Adresse:	192.168.1.xxx
		Network Mask:	255.255.255.0
		Gateway Address:	192.168.1.254
255 = (0xFF)	0x00	DHCP Anfrage / <i>DHCP request</i>	

Betriebsanleitung beachten! - Observe User Manual!

Änderungen vorbehalten / Subject to change

Steckerbelegung / Pin assignment

Status-LEDs	
	<p>LED1: Mod Status (grün/rot / <i>green/red</i>)</p> <p>LED2: Net Status (grün/rot / <i>green/red</i>)</p> <p>LED3: PORT1, Link/Data Activity (grün/gelb / <i>green/yello</i>)</p> <p>LED4: PORT2, Link/Data Activity (grün/gelb / <i>green/yello</i>)</p>

LED1: Mod Status

LED Status	Beschreibung / Description
OFF	- Spannungsversorgung fehlt oder wurde unterschritten / <i>Voltage supply absent or too low</i> - Hardwarefehler, Mess-System defekt / <i>Hardware error, measuring system defective</i>
ON grün / <i>green</i>	Mess-System betriebsbereit (kein Fehler) / <i>Measuring system ready for operation (no error)</i>
Flashing grün / <i>green</i>	Mess-System hat Parameter erhalten, die noch nicht aktiviert wurden / <i>Measuring system has got parameters which were not activated yet</i>
ON rot / <i>red</i>	Mess-System-Fehler aufgetreten / <i>Measuring system error occurred</i>
Flashing rot / <i>red</i>	Ein Kommando konnte nicht ausgeführt werden / <i>A command could not be executed</i>

LED2: Net Status

LED Status	Beschreibung / Description
OFF	Keine Versorgungsspannung, oder IP-Adresse / <i>Not powered, no IP address</i>
ON grün / <i>green</i>	Verbindung hergestellt / <i>connection established</i>
Flashing grün / <i>green</i>	keine Verbindung / <i>no connection</i>
ON rot / <i>red</i>	Gerät hat festgestellt, dass seine eigene IP-Adresse mehrfach im Netzwerk vergeben wurde / <i>The device has detected that its IP address is already in use</i>
Flashing rot / <i>red</i>	Eine oder mehrere Verbindungen zum Gerät sind im Timeout Zustand. Der Zustand wird nur verlassen, wenn alle Verbindungen wieder hergestellt wurden, oder ein Geräte-RESET vorgenommen wurde. / <i>One or more of the connections in which this device is the target has timed out. This state is left only if all timed out connections are re-established or if the device is reset.</i>

LED3+4: Link / Data Activity

LED Status	Beschreibung / Description
OFF	- Spannungsversorgung fehlt oder wurde unterschritten / <i>Voltage supply absent or too low</i> - Keine Ethernet-Verbindung / <i>No Ethernet connection</i> - Hardwarefehler, Mess-System defekt / <i>Hardware error, measuring system defective</i>
ON = Link	Ethernet Verbindung hergestellt / <i>Ethernet connection established</i>
Flickering = Data Activity	Datenübertragung TxD/RxD / <i>Data transfer TxD/RxD</i>

LED Farbe / Colour	Beschreibung / Description
grün / <i>green</i>	Normalbetrieb / <i>Normal operation</i>
gelb / <i>yellow</i>	Übertragungsfehler an Port festgestellt. Die Datenübertragung bleibt bestehen. Der Status wechselt nach 60 Sek. wieder zu „grün“. / <i>Transmission error detected on port. The data transmission remain unchanged. After 60 sec. the status changes to "green" again.</i>



Betriebsanleitung beachten! - Observe User Manual!

