

Accessories



Including

- Power supply accessories
- Mechanical and packaging accessories
- System and sensor cables and connectors

The accessories in this data sheet are applicable to users who are using SomatXR DAQ systems. Some of the accessories might also be interesting for eDAQXR, eDAQXR-lite and QuantumX users.

For use with

SomatXR Rugged DAQ

SomatXR Features

- Rugged, mobile data acquisition in a flexible, modular system
- Waterproof, dustproof, shockproof, vibrationproof
- Rugged: IP65/IP67, MIL202
- Wide thermal range: -40 to 80 °C (dewpointproof)
- Secure and efficient storage of measurement data



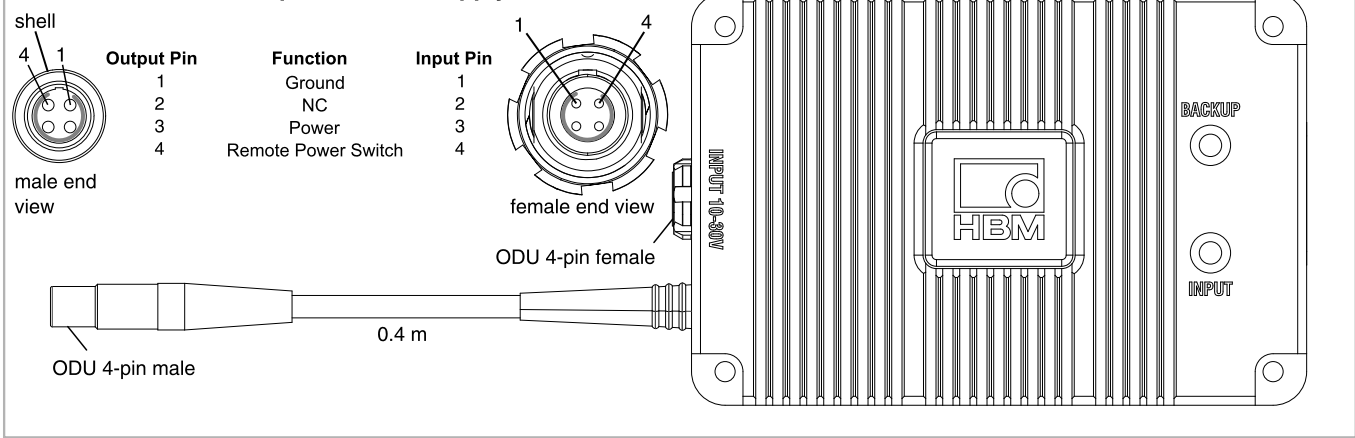
NOTE

All pin diagrams are shown from the pin side of the connector.

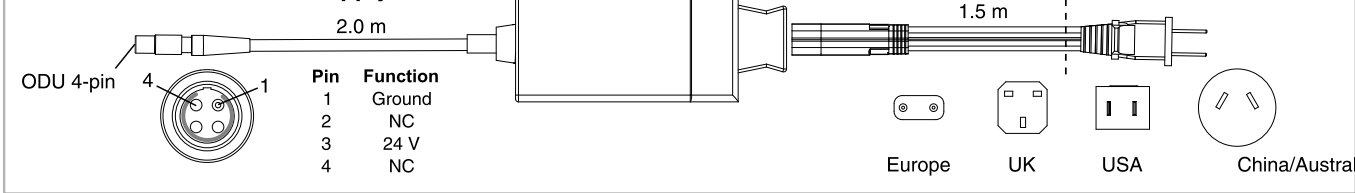
Power Supply Accessories

Order No.	Item	Description
1-UPX002-2	Uninterruptible power supply	Uninterruptible power supply (ODU 4-pin to ODU 4-pin) (also order a 1-KAB2115-2 cable to connect the UPX to a battery)
1-NTX002	AC/DC power supply unit	Input: 100-240 V _{AC} (±10%) 1.5 m cable with international plug set Output: 24 V _{DC} , max. 1.25 A 2 m cable with SomatXR power connector (1-CON-P1001) for MX modules only
1-NTX003-2	AC/DC power supply unit	Input: 100-240 V _{AC} (±10%), earth ground and DC isolated 2 m cable with international plug set Output: 24 V _{DC} , max. 5 A 2 m cable with SomatXR power connector (1-CON-P1001) for CX22B-R, CX23-R, EX23-R and MX modules
1-KAB2110-0.4 1-KAB2110-2	Power supply cable (0.4 or 2 m)	Power pass-through cable (ODU 4-pin to ODU 4-pin) for connection from a CX23-R to an MX module
1-KAB2115-2 1-KAB2115-5 1-KAB2115-10	Power supply cable (low loss) (2, 5 or 10 m)	Low-loss power supply cable (ODU 4-pin to exposed wires) for CX23-R, EX23-R and MX modules
1-KAB294-5	Power supply cable (5 m)	Power supply cable (ODU 4-pin to exposed wires) for MX modules only
1-KAB294-W-5	Power supply cable with angle plug (5 m)	Power supply cable with 90-degree angle plug (ODU 4-pin to exposed wires) for MX modules only
1-CON-P1001	Power supply connector	ODU-IP68, 4-pin plug for SomatXR modules

1-UPX002-2 Uninterruptible Power Supply



1-NTX002 AC/DC Power Supply Unit



Power Supply Accessories(Continued)

1-NTX003-2 AC/DC Power Supply Unit

Pin	Function
1	Ground
2	NC
3	24 V
4	NC

1-KAB2110 Power Supply Cable

Pin	Function
1	Ground
2	NC
3	10-30 V
4	NC

1-KAB2115 Power Supply Cable

Pin	Function
1	Ground
2	NC
3	10-30 V
4	Remote power switch

Wire color
Black
-
Red
Green

1-KAB294-5 Power Supply Cable

Pin	Function	Wire Color
1	Ground	Black
2	NC	-
3	24 V	Brown
4	NC	-

1-KAB294-W-5 Power Supply Cable with 90-degree angle plug

Pin	Function	Wire Color
1	Ground	Black
2	NC	-
3	24 V	Brown
4	NC	-

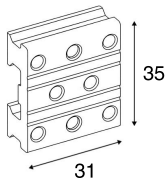
1-CON-P1001 Power Supply Connector

Housing, Insert with solder capacity, Half-shell, Cable collect, EMI ring, Sealing, Back nut for cable bend relief, Cable bend relief

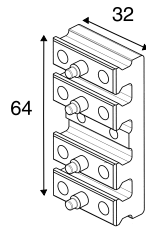
Mechanical and Packaging Accessories

Order No.	Item	Description
1-CASELINK	Installation parts	Four (4) elements for mechanical connection
1-CASELINK-RUG-2	Caselinks	Fastener CASELINK-RUG (4 pieces per package)
1-CASECARRY	Carrying handle	Hinged carrying handle and four (4) screw feet
1-CASEMOUNT	Mounting brackets	Two (2) fixing brackets to ground plate, includes 1-CASELINK
1-CASEMOUNT2-2	Mounting brackets	Two (2) fixing brackets, includes 1-CASELINK-RUG-2 for two (2) modules
1-CASEMOUNT3-2	Mounting brackets	Two (2) fixing brackets, includes 1-CASELINK-RUG-2 for three (3) modules
1-CASEMOUNT-XR-2	Mounting brackets	Two (2) fixing brackets, includes 1-CASELINK-RUG-2 for an MX module on an EXRCPU
1-CASEMOUNT-UMB-2	Universal mounting bracket	SomatXR top mount bracket for GPS, UPS, wireless access points, cameras, etc.
1-CON-A2013	Sensor protective caps	Four (4) protective caps for 14-pin ODU sensor connectors
1-CON-A2014	System protective caps	Two (2) protective caps for ODU system connectors (power input, FireWire, Ethernet)
1-PEL1520-2	Small Pelican case	Protective case for three (3) SomatXR modules and accessories
1-PEL1600-2	Large Pelican case	Protective case for six (6) SomatXR modules and accessories

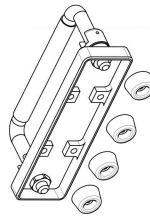
1-CASELINK



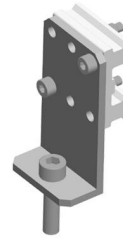
1-CASELINK-RUG-2



1-CASECARRY



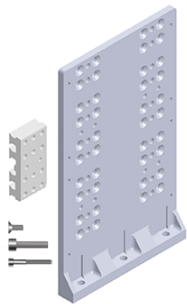
1-CASEMOUNT



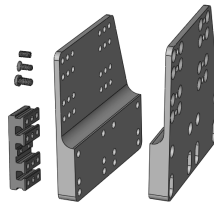
1-CASEMOUNT2-2



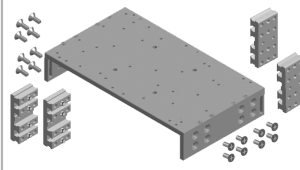
1-CASEMOUNT3-2



1-CASEMOUNT-XR-2



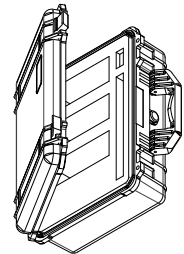
1-CASEMOUNT-UMB-2



**1-CON-A2013
1-CON-A2014**



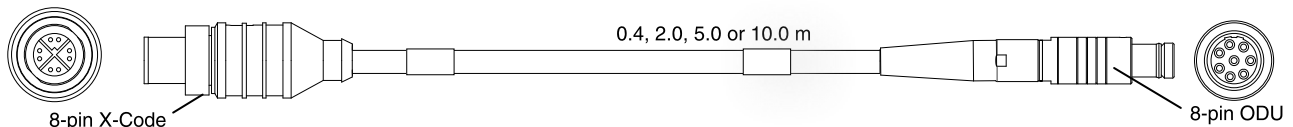
**1-PEL1520-2
1-PEL1600-2**



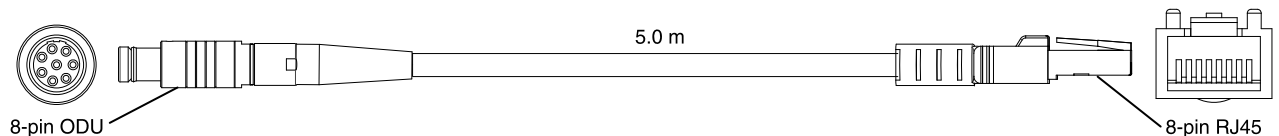
System Connections

Order No.	Item	Description
1-KAB2100-0.4 1-KAB2100-2 1-KAB2100-5 1-KAB2100-10	Ethernet cable (0.4, 2, 5 or 10 m)	Ethernet patch cable (8-pin ODU to 8-pin X-Code) for connection from CX22B-R, CX23-R or EX23-R to MX module
1-KAB273-5	Ethernet cable (5 m)	Ethernet patch cable (8-pin ODU to RJ45) for connection from PC to MX module
1-KAB2106-0.4 1-KAB2106-2 1-KAB2106-5 1-KAB2106-10	Ethernet cable (0.4, 2, 5 or 10 m)	Ethernet patch cable (8-pin X-Code to RJ45) for connection from PC to CX22B-R, CX23-R or EX23-R
1-KAB2107-0.4 1-KAB2107-2 1-KAB2107-5 1-KAB2107-10	Ethernet cable (0.4, 2, 5 or 10 m)	Ethernet patch cable (8-pin X-Code to 8-pin X-Code) for connection from EX23-R to CX22B-R or CX23-R
1-CON-P1017	Ethernet connector	ODU 8-pin push-pull plug
1-CON-S3005-2	Ethernet extension adapter	Ethernet adapter (8 pin female to female) and bracket
1-KAB272-0.2 1-KAB272-2 1-KAB272-5	FireWire cable (0.2, 2 or 5 m)	FireWire cable (8-pin ODU to 8-pin ODU) for connection between CX22B-R and MX module or two MX modules Note: MX modules can be supplied with power over this cable with max. 1.5 A (from the source to the last drain)
1-KAB272-W-0.2	FireWire cable with angle plugs (0.2 m)	FireWire cable with 90-degree angle plugs (8-pin ODU to 8-pin ODU) for connection between CX22B-R and MX module or two MX modules Note: MX modules can be supplied with power over this cable with max. 1.5 A (from the source to the last drain)
1-KAB276-3	Hub FireWire cable (3 m)	FireWire cable (8-pin ODU to IEEE 1394b) for connection from FireWire hub to MX module Note: MX modules can be supplied with power over this cable with max. 1.5 A (from source to the last drain)
1-KAB293-5	PC FireWire cable (5 m)	FireWire cable (8-pin ODU to IEEE 1394b) for connection from PC to MX module Note: Power cannot be supplied using this cable.

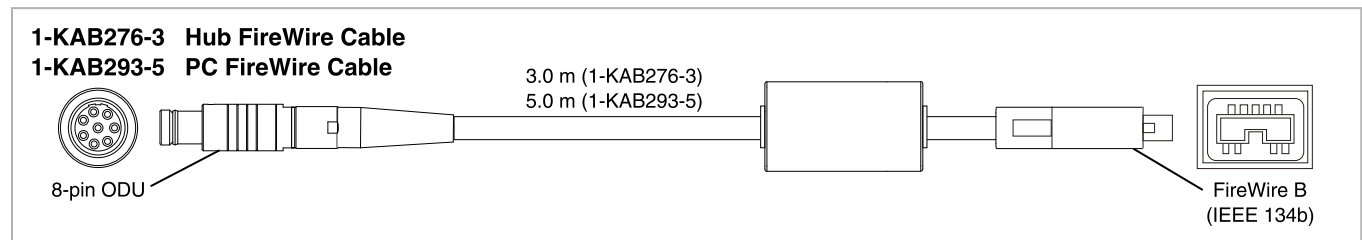
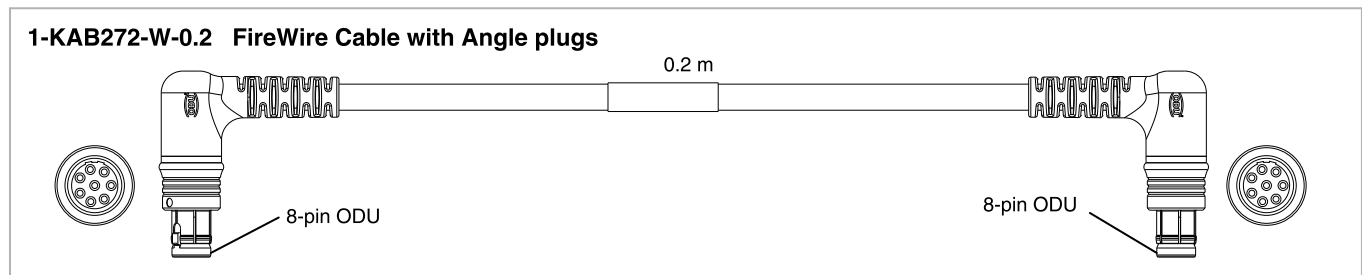
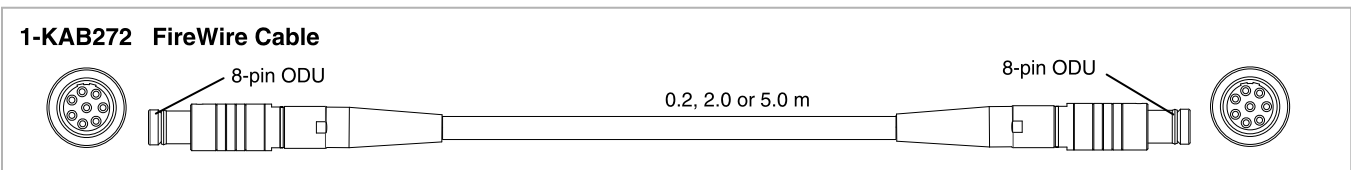
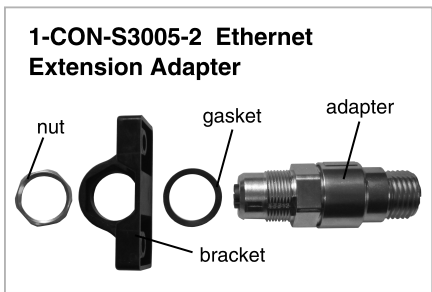
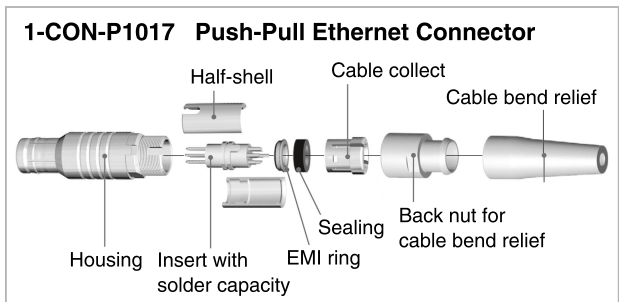
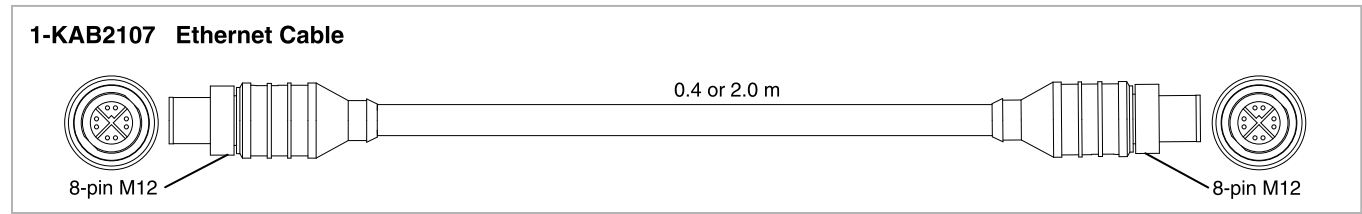
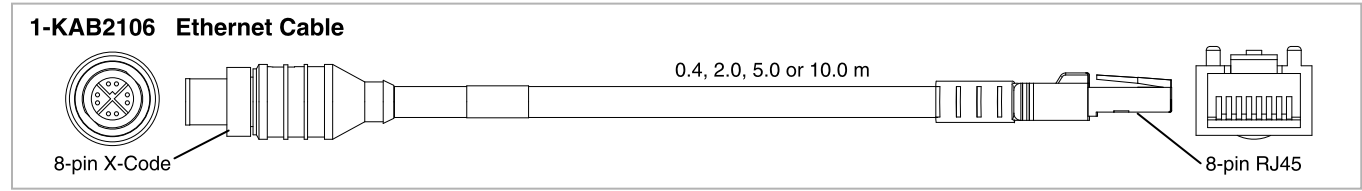
1-KAB2100 Ethernet Cable



1-KAB273-5 Ethernet Cable



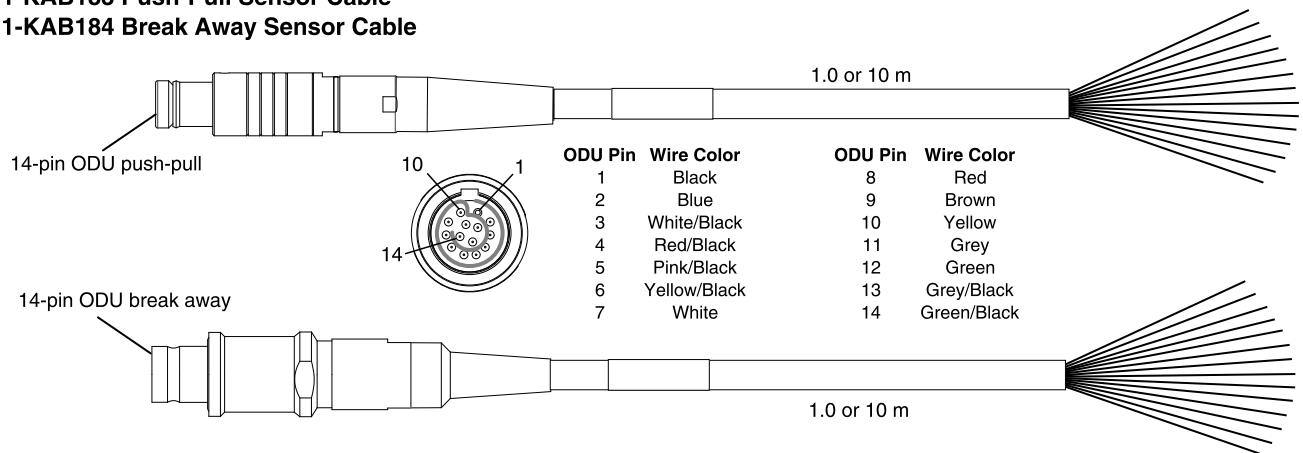
System Connections (Continued)



Sensor Connections analog

Order No.	Item	Description
1-KAB183-1 1-KAB183-10	Push-pull sensor cable (1 or 10 m)	Sensor cable with push-pull plug for MX modules and DIO port of CX22B-R (14-pin ODU to exposed wires)
1-KAB184-1 1-KAB184-10	Break away sensor cable (1 or 10 m)	Sensor cable with break away plug for MX modules and DIO port of CX22B-R (14-pin ODU to exposed wires)
1-CON-P1007	Sensor connector	ODU 14-pin push-pull plug
1-CON-P1016	Sensor connector	ODU 14-pin break-away plug
1-CON-A1007/1016	Tool	Tool for disconnecting KAB183, KAB184, CON-P1007 and CON-P1016 (Size 2 ODU connectors)
1-TEDS-PAK	TEDS chip	Ten (10) units 1-wire EEPROM DS24B33 (IEEE 1451.4 TEDS)
1-CON-S3006T -	Coupling -	RFID, Aluminum coupling, FKM seal and M12x1.5mm connection for MX590B-R
1-CON-S3007T	Coupling	RFID, Stainless steel coupling, FFKM seal and M12x1.5mm connection for MX590B-R
1-KAB430-0.3	BNC adapter (0.25 m)	BNC adapter (14-pin ODU to BNC)
1-SCM-R-SG120-2 1-SCM-R-SG350-2 1-SCM-R-SG1000-2	Quarter-bridge completion adapter (0.35 m) 120, 350 or 1000 Ω	Quarter-bridge completion adapter (14-pin ODU to 4-pin terminal connector) with 120-, 350- or 1000- Ω bridge resistor
1-SCM-R-TCK-2	Thermocouple adapter type K (0.21 m)	Thermocouple adapter (14-pin ODU to thermocouple type K plug)
1-SCM-R-TCE-2	Thermocouple adapter type E (0.21 m)	Thermocouple adapter (14-pin ODU to thermocouple type E plug)
1-SCM-R-TCT-2	Thermocouple adapter type T (0.21 m)	Thermocouple adapter (14-pin ODU to thermocouple type T plug)
1-SCM-R-TCJ-2	Thermocouple adapter type J (0.21 m)	Thermocouple adapter (14-pin ODU to thermocouple type J plug)

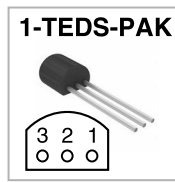
1-KAB183 Push-Pull Sensor Cable 1-KAB184 Break Away Sensor Cable



1-CON-P1007 Push-Pull Sensor Connector
1-CON-P1016 Break Away Sensor Connector

Diagram illustrating the components of the 1-CON-P1007 Push-Pull Sensor Connector and 1-CON-P1016 Break Away Sensor Connector. The components are shown in an exploded view, labeled as follows:

- Housing
- Insert with solder capacity
- Half-shell
- EMI ring
- Cable collect
- Back nut for cable bend relief
- Cable bend relief



14-pin ODU

0.25 m

BNC

10
1
14

ODU Pin
3
4
5 (jumper to pin 4)

Function
Signal (+)
Ground
GND cable detect

BNC
center
outer
NC

center
outer

0.35 m

14-pin ODU

10

1

14

ODU Pin	Function	Terminal Pin
1	Excitation (+)	1
8	Signal (-)	3
10	Sense (+)	2
13	Shield	4
14	TEDS	NC
15	TEDS	NC

Terminal connector

1 2 3 4

14-pin ODU

0.21 m

TC connector

10

1

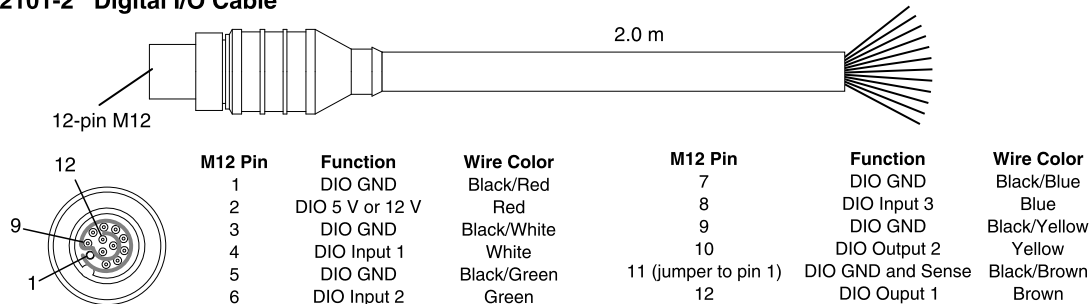
14

ODU Pin	Function	TC connector
7	Signal (+)	+
8	Signal (-)	-
13	TEDS	NC
14	TEDS	NC

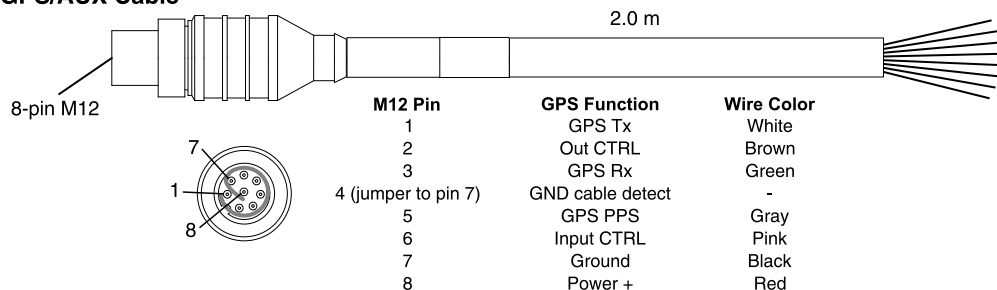
Sensor Connections digital / GPS

Order No.	Item	Description
1-KAB2101-2	Digital I/O cable (2 m)	DIO sensor cable (12-pin M12 to exposed wires) for CX23-R
1-KAB2108-2	GPS/AUX cable (2 m)	GPS/AUX cable (8-pin M12 to exposed wires) for CX23-R
1-KAB2109-2	CAN cable (2 m)	CAN cable (5-pin M12 to exposed wires) for CX23-R and MX471B-R
1-EGPS-5HZ-2	GPS receiver	5 Hz GPS receiver (for use on CX23-R, please order KAB2102-1 in addition)
1-GPS-USB-18HZ	GPS receiver	18 Hz GPS receiver (for use on CX22B-R)
1-EGPS-200-B-2	GPS receiver	Precision GPS receiver, Includes (1) Trigger Cable (1-SAC-GPSTRIG-2) and (1) GPS Antenna (1-EGPS-200-ANT-2) (also order a 1-KAB2102-1 to connect to a CX23-R module)
1-EGPS-200-P-2	GPS receiver	Precision GPS receiver PLUS Package - IMU and RTK Measurements, Includes (1) Trigger Cable (1-SAC-GPSTRIG-2), (2) GPS Antennas (1-EGPS-200-ANT-2) and (1) Dual Antenna Template (1-EGPS-200-TEM-2) (also order a 1-KAB2102-1 to connect to a CX23-R module)
1-EGPS-200-ANT-2	GPS antenna	Antenna for EGPS-200-B-2 or EGPS-200-P-2
1-EGPS-200-TEM-2	Template	Dual Antenna Template for EGPS-200-P-2
1-SAC-EXT-MF-0.4-2 1-SAC-EXT-MF-2-2 1-SAC-EXT-MF-5-2 1-SAC-EXT-MF-10-2 1-SAC-EXT-MF-15-2	EGPS extension cable (0.4, 2, 5, 10 or 15 m)	Extension Cable - Male/Female Connectors
1-SAC-GPSTRIG-2	Trigger cable	Trigger cable for EGPS-200-B-2 or EGPS-200-P-2
1-KAB2102-1	GPS/AUX adapter (1 m)	GPS/AUX adapter (8-pin M12 to 6-pin M8)

1-KAB2101-2 Digital I/O Cable



1-KAB2108-2 GPS/AUX Cable



Sensor Connections digital / GPS (Continued)

1-KAB2109-2 CAN Cable



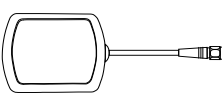
M12 Pin	Function	Wire Color
1	CAN_SHLD (CX23-R: CAN_GND)	Yellow
2	CAN_V+	Red
3	CAN_GND	Black
4	CAN_H	White
5	CAN_L	Blue

1-EGPS-5HZ-2


1-EGPS-USB-18HZ


1-EGPS-200-B-2

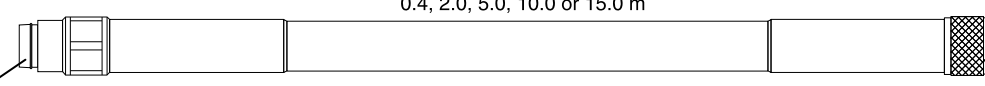

1-EGPS-200-P-2


1-EGPS-200-ANT-2


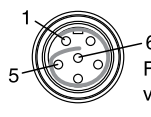
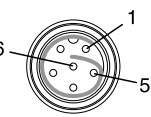
1-EGPS-200-TEM-2 GPS Antenna Template



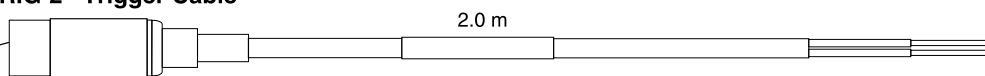
1-SAC-EXT-MF GPS Extension



M8 Pin	GPS Function	M8 Pin
2	GPS Tx	2
1	Out CTRL	1
6	GPS Rx	6
3	GND cable detect	3
4	GPS PPS	4
5	NC	5

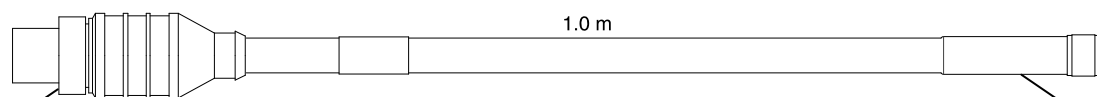


1-SAC-GPSTRIG-2 Trigger Cable

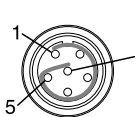
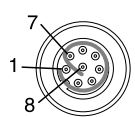


Function	Wire color
Shield	Brown
Conductor	White

1-KAB2102-1 GPS/AUX Adapter



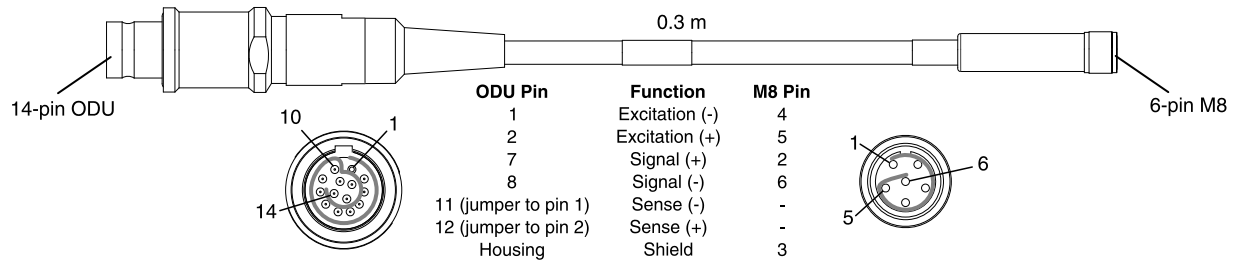
M12 Pin	GPS Function	M8 Pin
1	GPS Tx	2
2	Out CTRL	1
3	GPS Rx	6
4 (jumper to pin 7)	GND cable detect	3
5	GPS PPS	4
6	NC	-
7	Ground	-
8	Power +	5



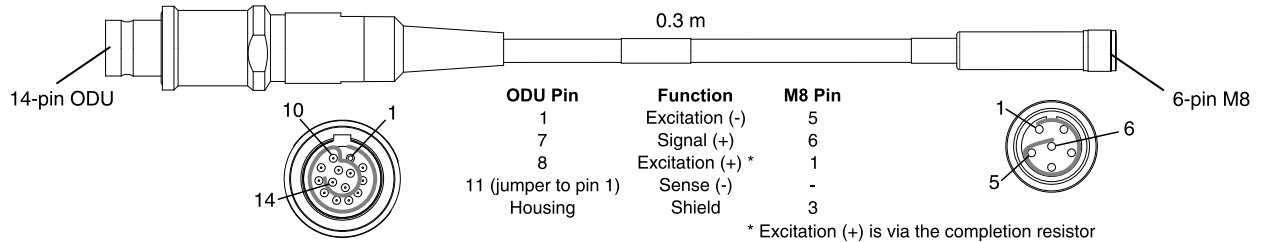
Sensor Connections eDAQ compatibility

Order No.	Item	Description
1-KAB2117-0.3	Full-bridge adapter (0.3 m)	Full-bridge adapter (14-pin ODU to 6-pin M8)
1-KAB2118-0.3	Quarter-bridge adapter (0.3 m)	Quarter-bridge adapter (no sense lines) (14-pin ODU to 6-pin M8)
1-KAB2119-0.3	Voltage adapter (0.3 m)	Voltage adapter (14-pin ODU to 6-pin M8)
1-KAB2122-0.3	Quarter-bridge adapter (0.3 m)	Quarter-bridge adapter (14-pin ODU to 6-pin M8)
1-KAB2104-1	CAN adapter (1 m)	CAN adapter (5-pin M12 to 6-pin M8)

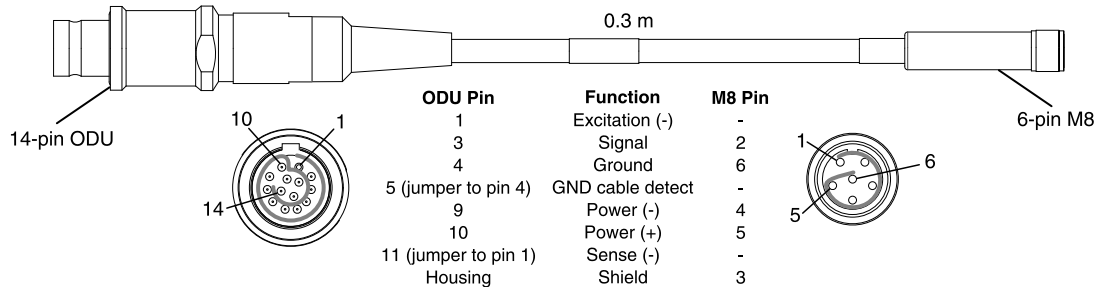
1-KAB2117-0.3 Full-Bridge Adapter



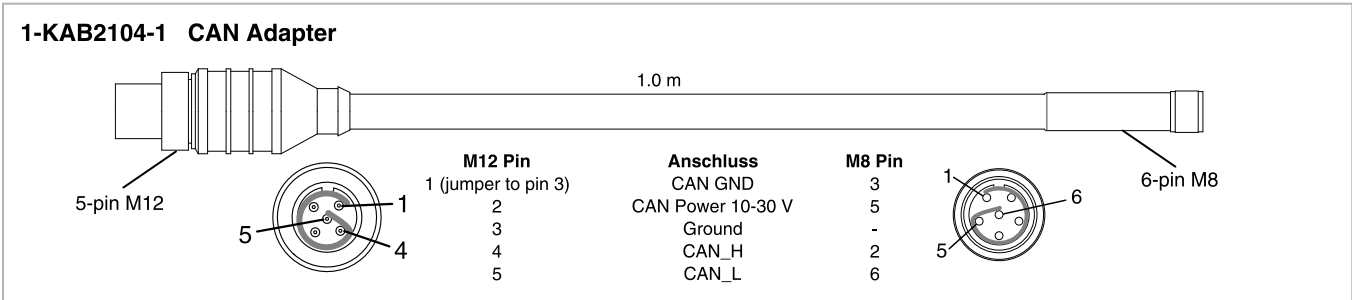
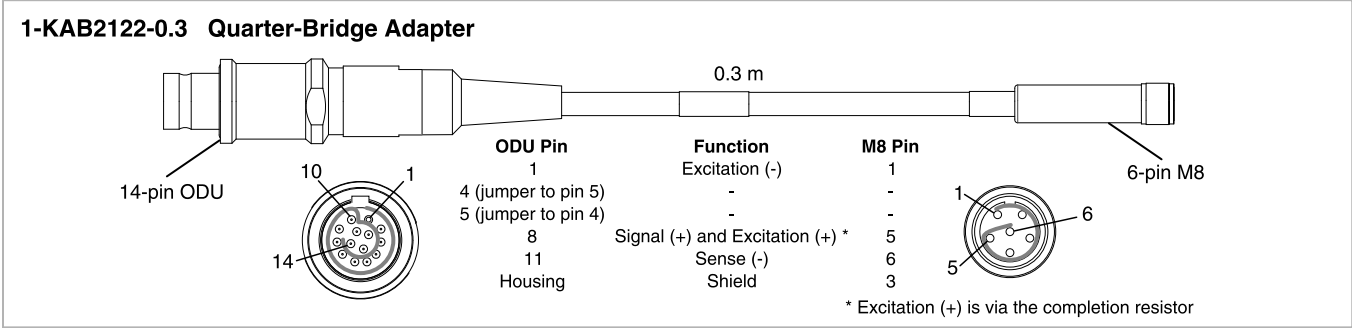
1-KAB2118-0.3 Quarter-Bridge Adapter (no sense lines)



1-KAB2119-0.3 Voltage Adapter



Sensor Connections eDAQ compatibility (Continued)



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measure and predict with confidence

