

DATASHEET

TRAFFIC MANAGEMENT ACCESSORY

Cables

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1 USER SAFETY WARNING

Please read the entire document carefully before using the device.

INSTALLATION

Please pay attention to the details below before installing and connecting the device:

- Only use provided or approved equipment for the operation.
- Only skilled and instructed persons shall install and connect the device.
- All connectors are pin-coded and fit in only one position.
- Be cautious when using the device on or around active roadways and pay attention to moving traffic.
- Make sure that test procedures are in accordance with local safety policies and procedures as well as company practices.

OPERATION

Please note that the device is not waterproof. Take care of proper rain coverage when working outside. Do not operate the device if the device itself or any cables are damaged.



Do not dispose waste electrical and electronic equipment in household trash.

TECHNICAL SERVICE

Only use provided or approved equipment for operation.

Do not attempt to service or repair this device:

- No user-maintainable parts are contained in the device.
- To avoid electrical shock, do not remove or open the cover.
- Unauthorized opening will void all warranties.
- smartmicro is not liable for any damages or harms caused by unauthorized attempts to open or repair the device.



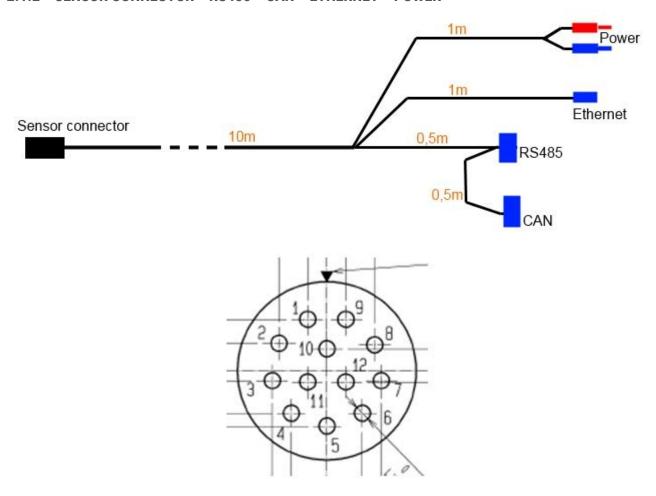
2 PLUG & PLAY CABLES

2.1 CABLE-0C0200

2.1.1 **LABEL**

| Active Plattform | Active Hardware | Active Modification | Active Revision |
|------------------|-----------------|---------------------|------------------------|
| CABLE | 0C | 02 | 00 |

2.1.2 SENSOR CONNECTOR + RS485 + CAN + ETHERNET + POWER



HRS LF10WBP-12S connector to sensor

View on solder cup side of socket showing the pin numbering (rear view of female counterpart to be connected to sensor)



2.1.3 PINOUT¹

| | Pin Layout LF10 | Color | Label | D: | SUB-9-f CAN | | DSUB-9-f RS485 | LAN | Banana |
|-------|--------------------|----------|-------------------|----|----------------|---|-------------------|-----|--------------|
| Pair1 | 1 | grey/red | ETH_TX_H | | | | | 1 | |
| Pair1 | 2 | red/blue | ETH_TX_L | | | | | 2 | |
| Pair2 | 3 | pink | Sensor RS485 RX L | | | 1 | 100.0 | | |
| Pair2 | 4 | gray | Sensor RS485 RX H | | | 2 | 120 Ω | | |
| Pair3 | 5 | brown | Sensor RS485 TX L | | | 4 | 100.0 | | |
| Pair3 | 6 | white | Sensor RS485 TX H | | | 3 | 120 Ω | | |
| Pair4 | 7 | blue | GND | | 3 | | | | black (blue) |
| Pair4 | 8 | red | V-Supply | | | | | | red (brown) |
| Pair5 | 9 | black | ETH_RX_L | | | | | 6 | |
| Pair5 | 10 | purple | ETH_RX_H | | | | | 3 | |
| Pair6 | 11 | green | CAN_H | 7 | 100.0 | | | | |
| Pair6 | 12 | yellow | CAN_L | 2 | 120 Ω | | | | |

2.1.4 RS485 COMPATIBILITY

RS485USB-00xxyy (Lindy) Half Duplex
 RS485LAN-00xxyy (Moxa) Full Duplex

 $^{^{1}}$ The resistance between pin 7 and 8 is approximately 1,6 Ω , so that we recommend a voltage source higher than 10V for TRUGRD sensors.



2.1.5 TECHNICAL DATA

2.1.5.1 CABLE

| Cable type Supplier | H03VVH2-F; 2-wire; oval; grey; 1,0m 3.28ft (Power) RS Online; Order Nr.: 491-825 |
|------------------------|---|
| Cable type | Network cable (LAN, RS485, CAN) |
| Supplier | Reichelt; PATCH-DW5E 2 GR |
| Cable type | KU110C12J002, SCRN, Highly flexible PVC control cable, shielded, twisted pair, 6 PAIR (Type UL/cUL-LIH 5 x (2xAWG26 ST) + 2xAWG24 C11Y), black; 10m |
| Supplier | 32.8ft |
| | Medikabel |

2.1.5.2 CONNECTOR

| Type Body | D-Sub 9 fem. (CAN) FKH1 von FCT |
|--------------|---|
| Туре | D-Sub 9 fem. (RS485) |
| Body | FKH1 von FCT |
| Туре | HIROSE LF10WBP-12S (Sensor connector), waterproof, locking mechanism, Plug, 12 contacts, female |

2.1.5.3 CABLE LENGTH

Total length: approx. 10m | 32.8ft





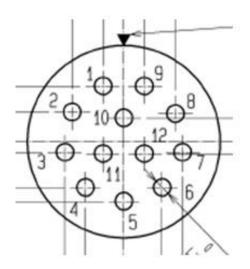
3 OPEN-WIRE CABLES

3.1 CABLE-0C0304

3.1.1 LABEL

| Active Plattform | Active Hardware | Active Modification | Active Revision |
|------------------|-----------------|---------------------|------------------------|
| CABLE | 0C | 03 | 04 |

3.1.2 SENSOR CONECTOR



HRS LF10WBP-12S connector to sensor

View on solder cup side of socket showing the pin numbering (rear view of female counterpart to be connected to sensor)



3.1.3 PINOUT

| Pin Layout LF10t | Designation | Color |
|---------------------|-------------|------------|
| 1 | - | Grey /Rosa |
| 2 | - | Red / blue |
| 3 | - | Rosa |
| 4 | - | Grey |
| 5 | - | Braun |
| 6 | - | White |
| 7 | - | Blue |
| 8 | - | Red |
| 9 | - | Black |
| 10 | - | Lila |
| 11 | - | Green |
| 12 | - | Yellow |
| 13 | shield | |

3.1.4 RS485 COMPATIBILITY

RS485USB-00xxyy (Lindy) Half Duplex RS485LAN-00xxyy (Moxa) Full Duplex

3.1.5 TECHNICAL DATA

3.1.5.1 CABLE

| 0111011 071222 | |
|----------------|--|
| Cable type | KU110C12J002, SCRN, Highly flexible PVC control cable, shielded, twisted pair, 6 PAIR (Type UL/cUL-LIH 5 x (2xAWG26 ST) + 2xAWG24 C11Y), black; 10m 32.8ft |
| Supplier | Medikabel |
| Outer diameter | 6,50 ±0,25mm 0.25 ±0.0098in |

3.1.5.2 CONNECTOR

| Туре | HIROSE LF10WBP-12S (Sensor connector), waterproof, locking mechanism, |
|------|---|
| | Plug, 12 contacts, female |



3.1.5.3 CABLE LENGTH

| Total length | approx. 10m 32.8ft |
|--------------|---|
| Open end | peeled off outer insulation approx. 10.0cm 3.93in |
| Wires | stripped and tinned approx. 3.0mm 0.11in |





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