SDT Ultrasound

Commercial document **DC.O4US.CABL.DAT.003**

CABLES WITH SENSOR HOLDER FOR O4US AIRBORNE SENSORS: Datasheet

Description:

O4US cables are essential accessories for connecting SDT permanent airborne sensors to the Online4US acquisition system. These cables are screened, twisted-pair data cable designed for low-frequency applications. Suitable for fixed installations and limited flexible use. They are intended for use in dry and damp indoor environments but is not suitable for outdoor applications.

The short lay length of the twisted pairs ensures effective decoupling of conductor circuits, while the screening offers reliable protection against electromagnetic interference.

Key features:

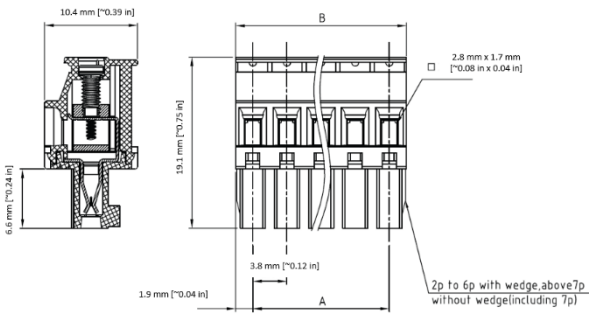
- **Compatibility**: Designed for use with SDT permanent sensors and the Oneline4US system.
- **Sensor Interface**: US sensor Holder
- **System Connection**: Pluggable terminal block through the enclosure's cable gland.
- **Durability**: Resistant to chemicals, oil, and harsh environmental conditions.
- **Flexible Installation**: Ideal for both fixed and conditional flexible use.
- **Available Lengths**: Multiple options to meet diverse installation requirements.

Specifications:

General		
Function		Interface SDT contact sensors-FU.O4US.USM
Type		Accessories, low voltage cable
Base reference		UNITRONIC LiYCY (TP) [LAPP ref. 0035141]
Design		Based on VDE 0812 and EN50288-7
SDT reference		FU.O4US.SH1.00X
Connector 1 (Airborne sensor holder)		Molex 6Way
Connector 2 (module side)		Terminal block 5 P
Approvals		LVD, RoHS
Number of wires		3 pairs
Wire configuration		2x3×0.14 mm², braid of tinned copper
Shielded		yes
Core identification code		Core identification code acc. to DIN 47100
Color		Grey RAL 7032

Electrical characteristics		
Max. operating voltage	V	< 350 (not for power applications) Tested at 1.2 kV
Conductor resistance (at 20 °C)	Ω/km	< 138
Insulation resistance (at 20 °C)	Ω/km	20
Capacitance between conductors (at 20 °C)	nF/m	120 (at 800 Hz)
Capacitance conductor to Shield (at 20 °C)	nF/m	160 (at 800 Hz)
Inductance	mH/m	0.65
Environmental characteristics		
Temperature range	°C	Flexing:-40 to +80 Fixed installation: -5 to +70
IP rating (in mated condition, sensor side)		65 (EN 60529)
Other		flame retardant acc. to IEC 60332-1-2
Mechanical		
Sheath material		special PVC-based compound
Wire Diameter	mm^2(AWG)	∅ 0.14 (26)
Outer diameter D (cable only)	mm	5.8
Bending radius		Static: 6xD; Dynamic (occasionnal flexing): 15xD;

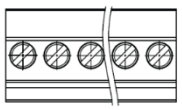
- TERMINAL BLOCK (5 P)- module O4US.USM side:



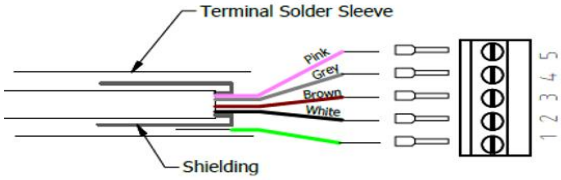
PITCH = 3.81 mm

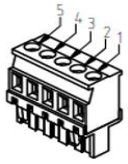
A = (NB PINS -1) x PITCH

B=NB. PINS x PITCH

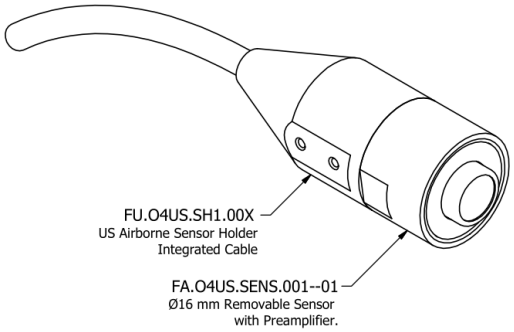


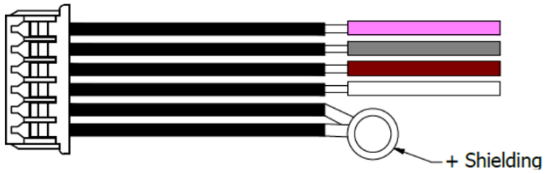
Color	Terminal block terminal/USM
1-White	2-+5 V
2-Brown	3-0V
3-Green	to GND
4-Yellow	to GND
5-Grey	4-S-
6-Pink	5-S+
Shield	1-GND





- Sensor Holder - sensor side (removable sensor, not included):





Ordering information:

Part number	Description
FU.O4US.SH1.001	O4US MK2 Iss.03 - US SENSOR HOLDER W/ CABLE (<5m) - WRTBL3663-5P
FU.O4US.SH1.002	O4US MK2 Iss.03 - US SENSOR HOLDER W/ CABLE (5,1..10m) - WRTBL3663-5P
FU.O4US.SH1.003	O4US MK2 Iss.03 - US SENSOR HOLDER W/ CABLE (10,1..25m) - WRTBL3663-5P
FU.O4US.SH1.004	O4US MK2 Iss.03 - US SENSOR HOLDER W/ CABLE (25,1..35m) - WRTBL3663-5P
FU.O4US.SH1.005	O4US MK2 Iss.03 - US SENSOR HOLDER W/ CABLE (35,1..50m) - WRTBL3663-5P
FU.O4US.SH1.011	O4US MK2 Iss.03 - US SENSOR HOLDER W/ HIGH FLEXIBLE CABLE (<5m) - WRTBL3663-5P Complementary data : see UNITRONIC FD CP (TP) plus A

Custom cable lengths and configurations are available upon request.

02	CMA 22/08/2025	Info for flexible installation, FU.O4US.SH1.011	GGH 25/09/25
01	CMA 22/01/2025	Original version	RGO 22/01/25
Revision	**Writer**	**Nature of modification**	**Approved**

The information herein is believed to be accurate to the best of our knowledge.
Due to continuous research and development, specifications are subject to change without prior notice.