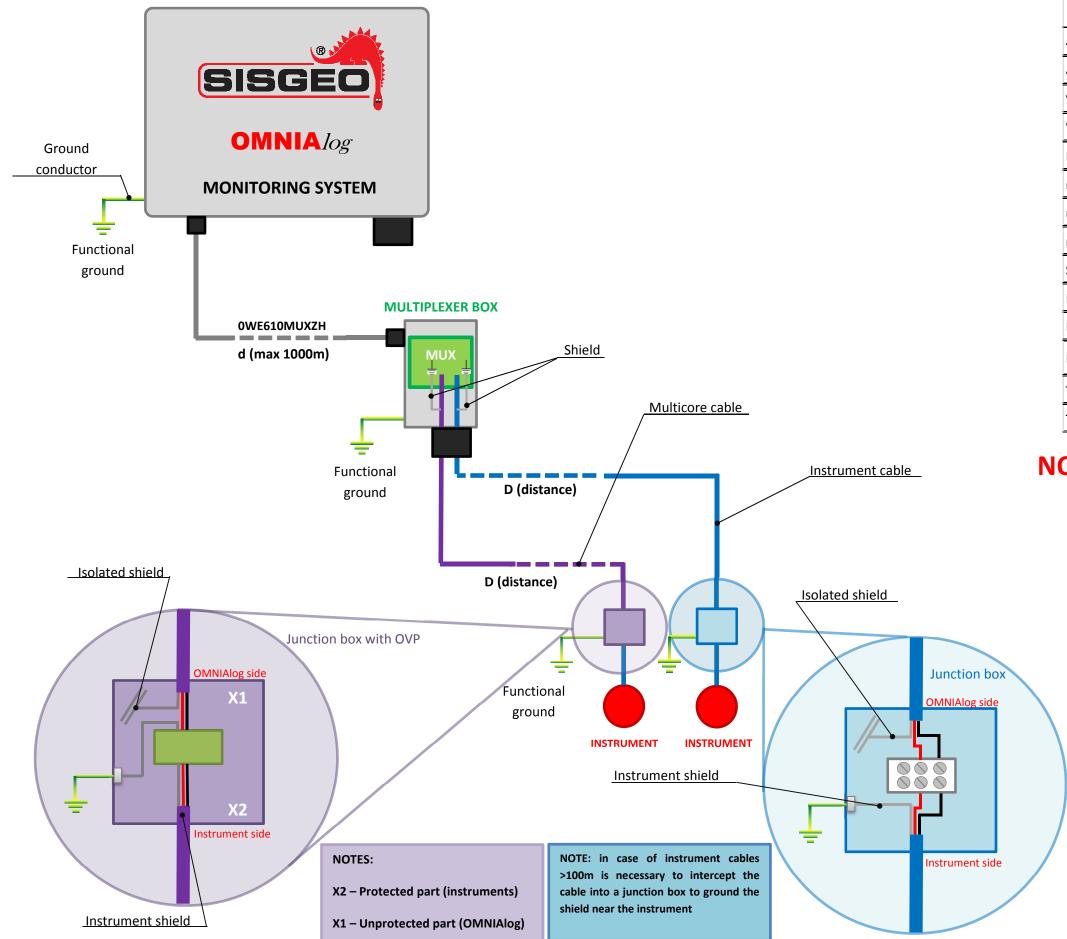# GUIDE LINE FOR OMNIAlog with external MUX

(rev.1 – 26.06.2014)

Instrument Type	Maximum Distance "D" (m)
4-20mA (2 wires, current loop)	1000 - d
4-20mA (3-4 wires)	1000 - d
Vibrating Wire	1000 - d
Vibrating Wire + Thermistor (NTC)	1000 - d
Platinum RTD (PT100)	500 - d
mV (High Impedance)	1000 - d
mV/V (4 wires)	50 - d
mV/V (6 wires)	1000 - d
Servo Inclinometer	60/70 - d
DEX35 (Verticality)	200 - d
DEX35S (Verticality)	200 - d
DEX35S (Bi-axial inclinometer)	200 - d (max distance depending to verticality)
Thermistor (NTC)	1000 - d
TEL-310S	1000 - d

NOTES:

● Cables, both instrumentals and multicores, should not be routed with other cables (i.e. power cables), but they must follow their own path through appropriate metallic conduit.

● Any extension between instrumental cables with multicore cables must be shielded carefully, respecting wires color code and using appropriate cable supplied by the manufacturer. Extension connections must be performed by using junction boxes supplied separately or, alternatively, by welding or through a terminal support.

● It is necessary to connect the instrument cable shields and/or the multicore cable shields directly on the shield terminal board (⊥) present on the MUX board into the OMNIAlog and/or the multiplexer box.
If the instrument cable is collected through a junction box with OVP or a junction box, it is essential to:
1. connect the shield into the junction box to give effect to the instrument internal protection;
2. to avoid ground loop, multicore cable shield coming out from junction boxes must be isolated individually
as shown in figures.