

Network Compatible Multi-layer inclinometer **IM-10UA/BA**

**Easier to handle!
High resolution, reduced wiring, improved workability**

An inclinometer developed to automatically measure the displacement of ground and structures.

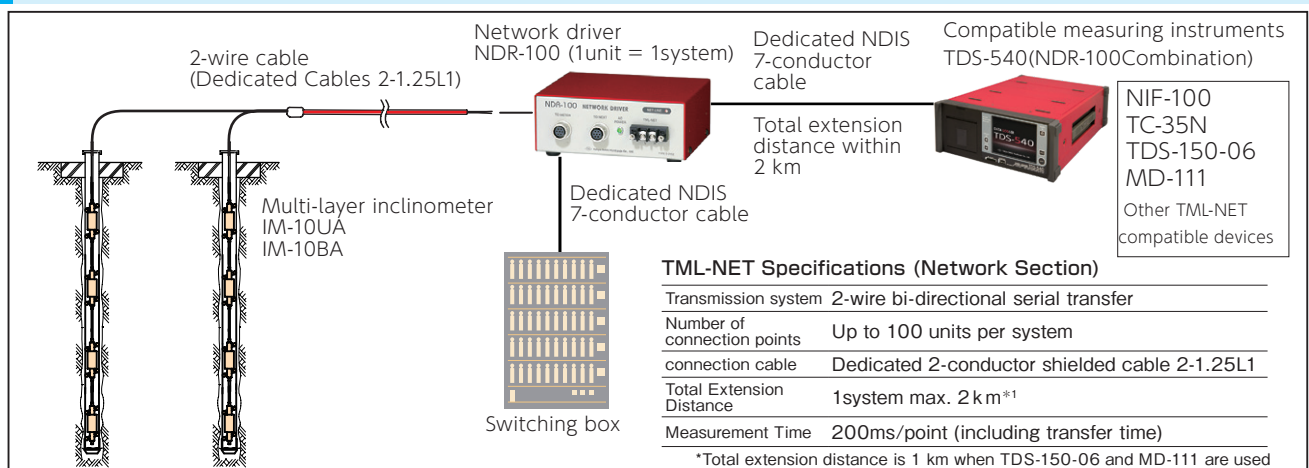
The dedicated guide tubes are installed vertically in the ground or structure in advance, and multiple inclinometers are connected to the guide tubes via relay rods (KBF-33JG) and fixed to the measurement positions. The built-in network module in the inclinometer provides the connection of inclinometers with a single cable in succession. It is used for measuring underground displacement of landslides and deformation state of earth retaining walls. The IM-10UA can measure only in one direction, and the IM-10BA can measure in both the X- and Y-directions simultaneously with a single unit. **Protection rating: IP68 equivalent**



Features

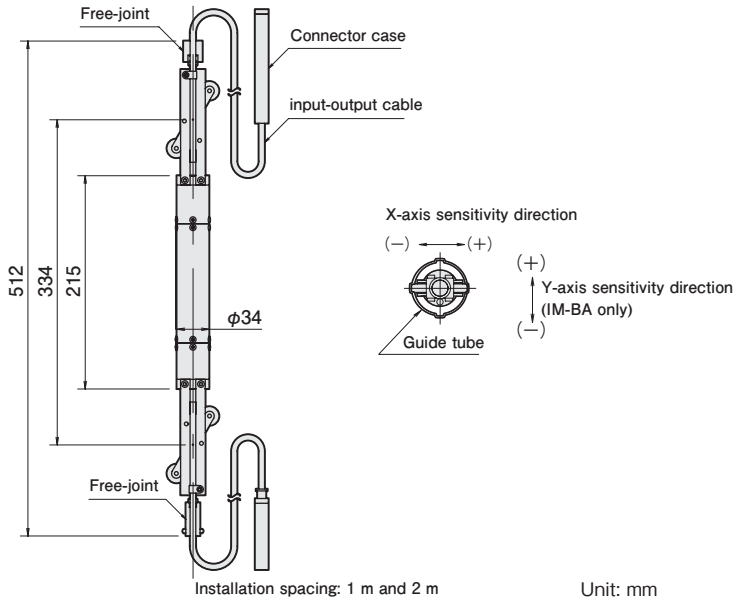
- Eliminated transportation constraints (horizontal transportation supported)
- Connection using only single cable
- All stainless-steel structure that provides excellent anti-corrosion resistance
- Adoption of new small diameter guide tube (IM-GP: $\phi 50.5$)
- Also compatible with conventional guide tubes ($\phi 56$) (optional)
- High resolution, compared to conventional NKB-10 (Cap. 10° : Res. $0.005^\circ \rightarrow 0.001^\circ$)
- Compact overall length (identical with KB-JG)
- Built-in temperature sensor allows temperature measurement per depth (optional)
- Can be mixed with older model NKBs

System Block Diagram



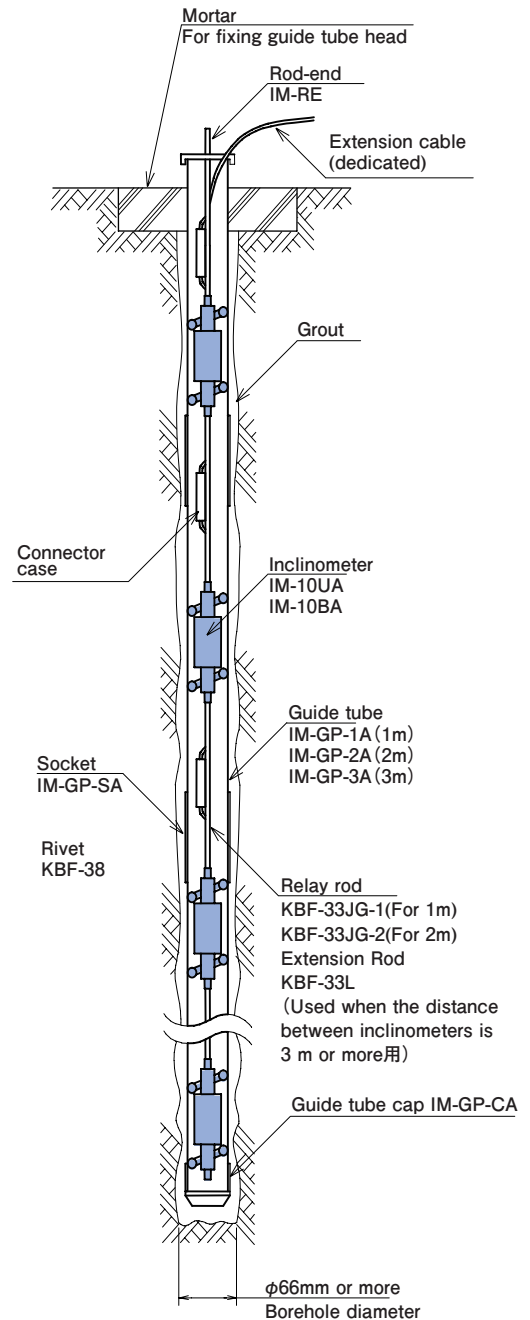
External Dimensions

IM-10UA (1-axis) / IM-10BA (2-axis)



Related products

Example of installation with inclinometer IM and related products



Specification

Type	IM-10UA	IM-10BA
No. of measuring axis	1	2
Capacity	$\pm 10^\circ$	
Rated indication	± 10000 digit	
Non-Linearity	0.5%RO	
Cross sensitivity	—	3%RO
Temperature range	-20 to +60°C	
Channel set	000 to 999	
input-output cable	$\phi 6$ mm 0.5mm ² 2-conductor shielded vinyl cable Special waterproof connector at the end	
weight	Approx. 1.7kg	
Standard installation interval	1m or 2m	
Total Extension Distance / Maximum Number of Units Connected	Within 2000m per system / Maximum of 100 units can be connected. (within 1 km when TDS-150-06 or MD-111 is used) Within 100m depth per hole / Max. 50 units (within 100 channels when TDS-150-06, TC-35N, MD-111 are used)	

Related products

Guide tube	IM-GP-1A (1m) / IM-GP-2A (2m) / IM-GP-3A (3m)
Guide tube socket	IM-GP-SA
Guide tube cap	IM-GP-CA
Rod end	IM-RE
Relay rod	KBF-33JG-1 (1m) / KBF-33JG-2 (2m)
Relay rod for mixed use	IM-RR-1A-LF (1m) / IM-RR-2A-LF (2m) IM-RR-1A-MF (1m) / IM-RR-2A-MF (2m)
Extension rod	KBF-33L-1 / KBF-33L-2
Rivet	KBF-38 (IM-GP/ Rivets for KBF-31 (80 pcs.))
SB Tape	— (IM-GP/ SB tape for KBF-31 (10 pcs.))

We also offer extension rods, head caps, rivets, riveters, and demountable pliers. Please contact us for details.



Approval Certificate ISO9001
Design and manufacture of
strain gauges, strain measuring
equipment and transducers

The contents of this catalog are subject to change without prior notice.
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