



# MIDORI's Small Tilt Angle Sensor

## THD2000Z



Concept

Small size / Thin

×

Environmental Resistance

×

Light Weight

Future

Φ40×H10mm

Withstanding strong vibration and shock

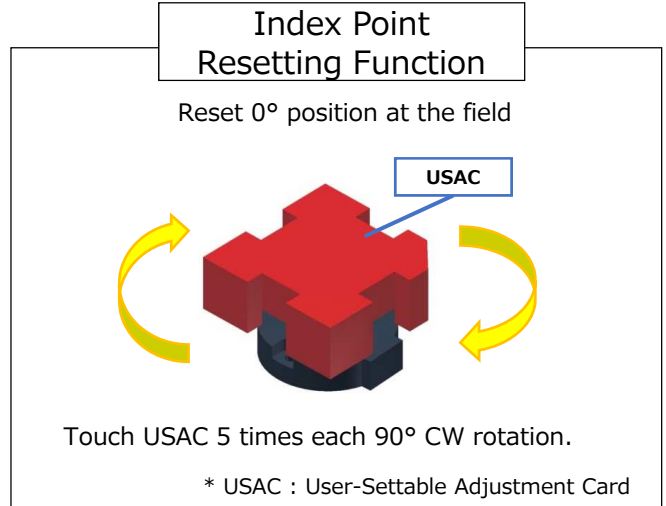
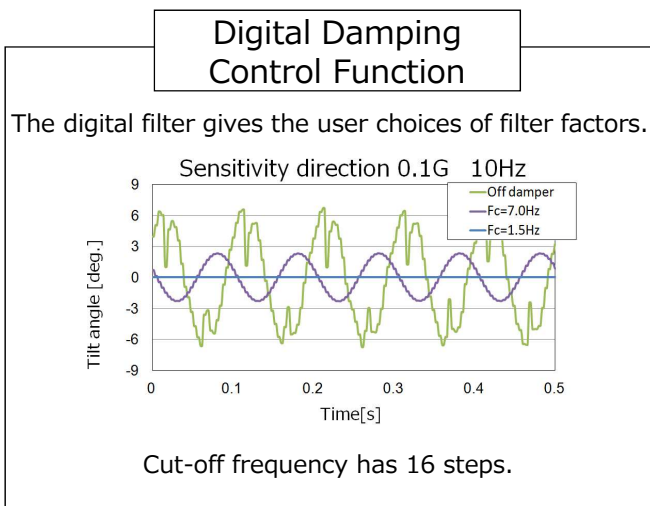
Mass only 15g

⇒ Space-saving

⇒ It has no mechanical resonance point in the detecting element.

⇒By applied resin-made housing case, total weight of sensor become lighten.

### Suitable setting can be changed according to use environment.

















## MAIN APPLICATIONS

Market	User	Installed	Application
Medical equipment	A medial equipment maker	Surgical table	Control of tilt angle
Civil engineering & construction	A Civil engineering measurement maker	Viaduct	State monitoring of bridge girder
Industrial vehicle	A Specially equipped vehicle maker	Aerial work platform	Attitude control of Bucket
Automobile equipment	An Automobile Seat maker	Inspection machine for power seat	Tilt angle measurement of seat backrest
Agricultural machinery	An Agricultural machine maker	Riding-type tea plucking machine	Attitude control of vehicle

⇒For details, please refer "Usage Case" flyer.

# Finding a solution to problem by using THD2000Z

<b>Problem</b>	<b>Customer Wish</b>	<b>MIDORI's Suggestion</b>
The device be wanted to down-sizing however the space occupied by sensor can not be smaller.	 The sensor which can be incorporated in a limited space is needed.	 THD2000Z is small and thin, $\Phi 40 \times H10$ mm
It is difficult to reduce weight of the device.	 Weight of the sensor part is needed to as light as possible.	 Weight of THD2000Z is only 15g max.
Vibration from the machine give influence to sensor's output.	 Want to use under vibration condition.	 THD2000Z has no mechanical resonance point in the detecting element.
Longer transmitted cable might be affected external noise.	 Want to use output signal which is resistance to noise.	 Serial Output (RS485) resists to noise and suitable for long distance transmission.
Some different tilt angle types of sensors are needed.	 Want to use different tilt angle types of same sensor in many places.	 THD2000Z is available tilt angle, $10^\circ \sim 60^\circ$
It is difficult to counter-measure cancellation of noise by vibration by own.	 Want to get the tilt angle sensor which is cancelled noise by vibration.	 THD2000Z apply digital filter. It makes wider choice of cut-off frequency.
It is not easy the sensor to be set horizontal position.	 Want to set the sensor horizontal position at the field.	 Using USAC, THD2000Z can be set horizontal position easily.

Please contact ;

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