Hitelecom®

TILT SENSOR

Triaxial | Medium Precision

H310-TS350M



KEY INDICATORS

Tilt Range	Accuracy	Directions	Architecture	System Talk	Lifespans
Per-axis range* By configuration	±0.1°	X / Y / Z Three-axis	1-min sampling 4-hour reporting	4G / NB-IoT / LoRa	10 years*

OVERVIEW

The H310-TS350M is a medium-precision triaxial tilt sensor with ±0.1° accuracy for inclination monitoring at defined points on racks, poles, fixed supports and machine frames. One-minute acquisition and four-hour scheduled reporting combine frequent sensing with remote records. Establish a rigid mounting point, asset ID and initial angle before comparing later changes.

FEATURES

Cloud
Hitelecom Cloud or a compatible customer platform; select the supported data interface.

Green
1-min acquisition, 4-hour reports. 10-year reference profile at 25°C with normal signal.*

IP68 / IP66
Metal IP68 / plastic IP66 enclosure options. Select protection for the installation conditions.

NFC
NFC activation and local configuration support installation and device commissioning.

OTA
Remote firmware updates on supported versions; confirm the supplied device configuration.

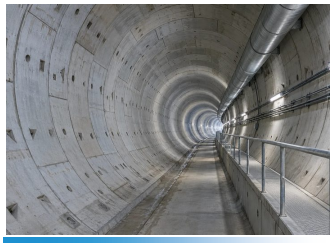
Innovation
Three-axis sensing with defined angle outputs, axis convention and an installation reference.

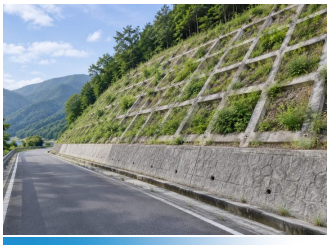
APPLICATIONS


Warehouse racking


Street-light poles


Bridge members


Tunnel linings


Slopes


Heritage structures


Machine frames

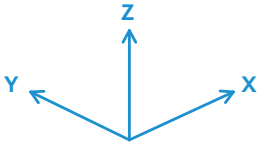

Water-tank supports

Item Numbers		Description
Physical Characteristic	Network Standard	LTE Cat.1 (4G); NB-IoT / LoRa by selected variant
	Power Supply	Battery: 19000 mAh (38000 mAh option)
	Consumption	Sleep mode: 25 uW (platform reference)
	Battery Life	10 years*: 1-min acquisition; 4-hour reporting
	SIM card	Standard IoT SIM; embedded SIM (eSIM option)
	Antenna	By supplied radio / enclosure configuration
	Size	115 x 90 x 60 mm (platform body reference)
	Installation	Wall, pole or DIN-rail mounting, by selected kit
Frequency Band	FDD-LTE	B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66*
	TDD-LTE	B34 / B38 / B39 / B40 / B41*
Speed Rating	FDD-LTE	Downlink: 10 Mbps; uplink: 5 Mbps (4G reference)
	TDD-LTE	Downlink: 8.96 Mbps; uplink: 3.1 Mbps (reference)
Power Rating	FDD-LTE	+23 dBm (Power Class 3, 4G reference)
	TDD-LTE	+23 dBm (Power Class 3, 4G reference)
Tilt Sensor	Range	Working range specified per axis / configuration*
	Accuracy	±0.1° (grade; test conditions by configuration)*
	Resolution	Reported increment specified per axis*
	Type	MEMS; three-axis sensing (X / Y / Z)

SPECIFICATIONS

Item Numbers		Description
Waterproof Rating	Metal Physical Body Protection	IP68 (metal enclosure)
	Plastics Physical Body Protection	IP66 (plastic enclosure)
Reliability	Electrostatic discharge immunity	Contact discharge: 6 kV; air discharge: 8 kV
	Surge immunity	Differential mode: 1 kV; common mode: 2 kV
	Fast Transient Burst	Power supply circuit: 2 kV
Environmental Range	Operating temperature	-40°C to +85°C
	Operating humidity	5% to 95% RH (non-condensing)
	Storage temperature	-40°C to +85°C
Certification References CCC / CE / FCC / RoHS	Safety	EN IEC 62368-1:2020+A11:2020
	Health	EN IEC 62311:2020
	EMC	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-52 V1.2.1 (2021-11)
	Radio	ETSI EN 301 908-1 V15.2.1 (2023-01) ETSI EN 301 908-13 V13.2.1 (2022-02)
	Frequency Range	FDD B1: 1920-1980 TX; 2110-2170 RX MHz FDD B3: 1710-1785 TX; 1805-1880 RX MHz FDD B8: 880-915 TX; 925-960 RX MHz TDD B40: 2300-2400 MHz TX / RX
	Maximum Output Power	FDD B1: 22.89 dBm max. FDD B3: 23.23 dBm max. FDD B8: 24.02 dBm max. TDD B40: 22.24 dBm max.
	Modulation	QPSK, 16QAM

Sensing axes*



Schematic only

X/Y/Z identify sensing axes. Angle definitions and reference orientation follow the supplied protocol. Gravity-referenced inclination does not independently determine yaw.

Specify per-axis range, resolution and accuracy conditions for the ordered configuration.

10-year reference: 1-minute acquisition, 4-hour reporting, 25°C, normal signal. Actual life varies with enabled functions, event frequency and radio retries.

CE completed for H200/H300/H500 platform. Confirm certificate applicability and other compliance references for the supplied configuration.

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