

# TILIA T100P TECHNICAL DATASHEET

**TILIA**  
SERIES



## Accelerometer

Number of sensors	3 (tri-axial)
Sensor Technology	MEMS
Bandwidth	0-200Hz
Fullscale Range	±4g, ±2g, others on request
Dynamic Range	110dB
Noise	40ug (0-30Hz)

## Digitizer

Sampling Channels	Simultaneous 3 channels
Resolution	20 bit Sigma-Delta converters
Sample Rates	50, 100, 200, 250, 500
Anti Aliasing Filter	Analog and digital

## Time

Time sources	GNSS, PTP, NTP, RTC
Time Host	Instruments with GNSS receiver can work as PTP master for other instruments in the daisy chain or network.
Time offset	as low as 40ns offset between daisy chained instruments.

## Events & Triggers

Event Recording	Event Recording to miniseed
Trigger Algorithms	STA/LTA, Threshold, MMI, Time
Threshold	Freely configurable
Pre-event period	1-120 seconds
Post-event period	1-180 seconds

## Alarm Output

Relays	2 x NO/NC configurable relays
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## Communication

Configuration Ethernet	Web Interface, mobile friendly 10/100 Base-T (2 interfaces) 2nd interface for daisy chain
Daisy Chaining	Fully supported. Data, PoE and PTP over ethernet.
Node Spacing	100 meters between daisy chained instruments.
Optional	T100PF with 2 x Fiber Optical Ethernet Transceivers built-in (2km/20km node spacing)
4G/LTE	Optional External

## Certifications and tests

Seismic Qualification	60068-3-3 Seismic Zone 4
Local Guidelines	DPWH & NSCP 105.2

## Data, Storage & Servers

Record Types	Events, Ringbuffer
Data Format	Miniseed
Removable Memory	microSD Card (8GB default)
Data Upload	FTP or Seisodin Cloud
Data Retrieval	uSD, FTP, Web Interface

## Dimensions & Environment

Dimensions	120 x 179 x 104mm
Weight	2.0 kg
Installation	Single-bolt + 3 levelling screws
Ingress Protection	IP67 with mated connectors
Material	Anodized Aluminum
Temperature	-20 to +70°C
Humidity	0-100% RH non-condensing

## Power

Sources	4 prioritized power sources DC supply, PoE, External Battery, Internal Battery
Supply Voltages	DC: 18-60V (48V nom.) PoE: 40-57V (48V nom.) Ext Battery: 11-14.5V (12V nom) Int Battery: 3.0-4.2V (3.7V nom.)
Power Consumption	~1.5W from DC supply
Protection	Reverse, Over/Under voltage
Grounding	Grounding Point on base

## Connectors

Ethernet	2 x RJ45 (optional MIL)
Power	1 x 4p M12
GNSS	1 x SMA

## Configuration & Monitoring

Configuration	Configuration through intuitive and modern web interface. Smartphone friendly interface.
Health Monitoring	Instrument generates state-of-health reports, log files and heart beats.

Specifications subject to change without notice



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