

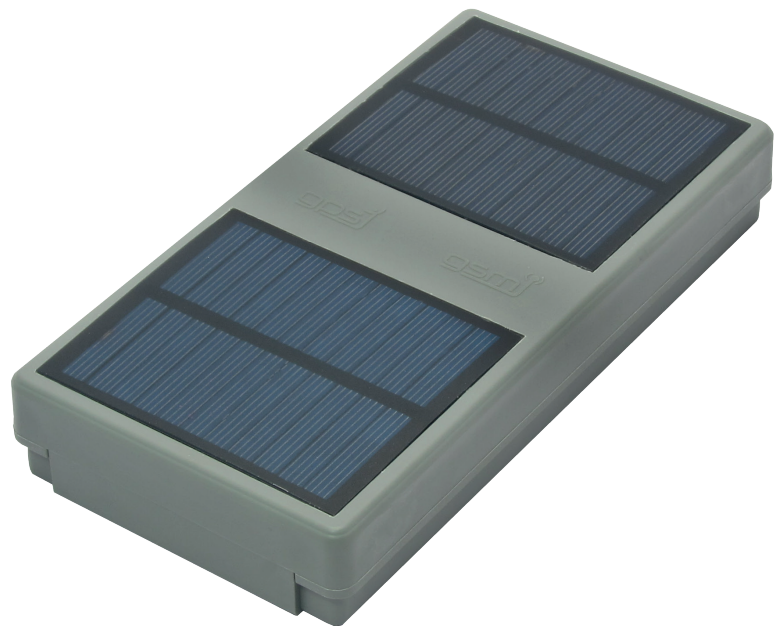
# TotalFinder Solar

UNIVERSAL GPS MONITORING UNIT WITH SOLAR-CHARGED HIGH CAPACITY BATTERY FOR UNLIMITED TRACKING

## USAGE AND CHARACTERISTICS

Device is designed to monitor railway wagons, containers, machinery and construction equipment, trailers and caravans.

- » Tracking at preselected time interval
- » Monitoring of temperature, acceleration, vibration and tilting
- » G-shock event reporting
- » Bluetooth 5.0 long range for external Sensor (optionally)
- » Easy installation by extremely strong magnets
- » Special holder for secure installation available
- » Ultra sensitive solar panels
- » NB IoT and Cat M1 connectivity (optionally)



## MEASURES AND TRANSMITS

- » Exact position of GNSS satellite system
- » GSM cell ID and signal strength
- » Speed and direction of movement
- » Temperature, altitude
- » Tilting - removal detection
- » Battery voltage and status
- » G-shock event reporting
- » Up to 10 values of external long range BT 5.0 sensors

## TYPES AVAILABLE\*

TYPE	GSM	BATTERY	CHARGING	LONG RANGE RECEIVER
<b>TF 170 202</b>	2G	Li-Ion 15 000 mAh	Solar panels	-
<b>TF 170 002</b>	4G NB-IoT/Cat M1	Li-Ion 15 000 mAh	Solar panels	-
<b>TF 172 002</b>	4G NB-IoT/Cat M1	Li-Ion 15 000 mAh	Solar panels	Bluetooth 5.0

\*for customized solutions please feel free to contact us

## ACCESSORIES

<b>MD TF1 002</b>	Robust metal holder for secure fixing (protected by patent)
<b>MD 092 001</b>	Special tool for releasing the unit from holder
<b>BS 010 390</b>	BT temperature sensor
<b>BS 020 130</b>	BT robust temperature sensor
<b>BS 030 380</b>	BT access card
<b>BS 040 540</b>	BT door sensor



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## TECHNICAL PARAMETERS

<b>GSM</b>	version 2G	850/900/1800/1900 MHz	
	version 4G NB-IoT/Cat M1	B1@2100MHz, B3@1800MHz, B8@900MHz, B5@850MHz, B20@800MHz, B28@700 MHz	
	version 4G LTE Cat M1 / NB-IoT/ EGPRS	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B26/B28/B39 - for Cat M1 only @LTE 850/900/1800/1900 @EGPRS	
	SIM	Nano Sim, Plug -in 1.8 V	
		SimChip	
	Types of communication	Calling , SMS, GSM Data, GPRS	
	Calls	Alarm call	
	SMS	Alarm & Info SMS, SMS commands, requests, SMS configuration	
GPRS internet connectivity	Class 12/ static & dynamic IP VPN, UDP protocol / 128bit security encryption key / FW upgrade, configuration settings, on-line value reading, report memory reading, control		
<b>GNSS</b>	GPS , Glonass, Beidou	33 tracking channels, 99 acquisition channels, 210 PRN channels	
<b>ANTENNAS</b>	GPS, GSM, BT 5.0	Internal	
<b>BATTERIES</b>	Type and capacity	Li-Ion 15 600 mAh rechargeable	
<b>CONSUMPTION</b>	Standby	4 mAh / day	
	One Trackpoint + data sending	1 mAh / each position	
	Self-discharge of battery	14 mAh / day	
<b>SENSORS</b>	3 dimensions G sensor	Movement detection / tilt detection / G-shock	
	Other sensors	Temperature	
<b>WIRELESS EXTERNAL SENSOR INTERFACE</b>	Bluetooth 5.0 long range	Range up to 100m in free space / 30m in buildings Up to 10 sensors	
<b>INTERNAL MEMORY</b>	Flash 512 kB	Capacity 5000 events or positions	
<b>DIMENSIONS</b>	Plastic box	177 x 85 x 25 mm	
<b>TEMPERATURE RANGE</b>	Li-Ion rechargeable batteries	-25 °C up to +80 °C, charging +5 °C up to +35 °C	
<b>PROTECTION CLASS</b>	IP66	Waterproof	
<b>WEIGHT</b>	With batteries	550 g	
<b>STANDARDS</b>	EMC	EN 50121-3-2 ed.4   EN 61000-6-4:2007+A1:2011   EN 55032:2015   EN 55024:2010	
	LVD	EN 62368-1:2014+A11:2017	
	Climatic testing	EN 50155   EN 60068-2-2   EN 60068-2-1 ed.2   EN 60068-2-30 ed. 2	
	Shock and vibration	EN 61373 ed. 2	
	IP code	EN 60529	