

TF1

TotalFinder

UNIVERSAL MONITORING UNIT FOR LONG-TERM TRACKING & MONITORING WITH AN EXTREME BATTERY LIFE AND EASY INSTALLATION BY STRONG MAGNETS

USAGE AND CHARACTERISTICS

For monitoring and tracking of railway wagons, containers, heavy machinery and construction equipment, trailers and caravans.

- » Tracking at preselected time interval
- » Monitoring of temperature, air pressure, humidity, 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
- » Charging by USB
- » Battery life up to 6 years (with primary batteries, 1 position a day)
- » Ultra sensitive solar panels (optionally)
- » 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, air pressure, humidity, altitude
- » Tilting - removal detection
- » Battery voltage and status
- » G-shock event reporting
- » Up to 100 values of external long range BT 5.0 sensors

TYPES AVAILABLE

TYPE	GSM	BATTERY	CHARGING	LONG RANGE RECEIVER
TF 100 203	2G	Lilon 15 600 mAh	USB	-
TF 100 208	2G	Primary battery 21 000 mAh	-	-
TF 100 204	2G	Lilon 21 600 mAh	USB	-
TF 170 203	2G	Lilon 15 600 mAh	Solar panels	-
TF 100 304	4G NB IoT	Lilon 21 600 mAh	USB	-
TF 170 303	4G NB IoT	Lilon 15 600 mAh	Solar panels	-
TF 172 203	2G	Lilon 15 600 mAh	Solar panels	Bluetooth 5.0
TF 172 303	4G NB IoT	Lilon 15 600 mAh	Solar panels	Bluetooth 5.0

*for customized solutions please feel free to contact us

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INSTALLATION BY STRONG MAGNETS

ACCESSORIES

MD 092 000	Robust metal holder for secure fixing (protected by patent)
MD 092 001	Special tool for releasing the unit from holder
SA 092 000	USB charger 2A (including cable)
	BT 5.0 long range sensors (temperature, humidity, air pressure)



TECHNICAL PARAMETERS

GSM	version 2G	850/900/1800/1900 MHz	
	version 4G LTE Cat NB IoT	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	
	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	
GNSS	GPS , Glonass, Beidou	33 tracking channels, 99 acquisition channels, 210 PRN channels	
ANTENNAS	GPS, GSM, BT 5.0	Internal	
BATTERIES	Type and capacity	Lilon 15 600 mAh rechargeable	LiSoc 21 000 mAh non rechargeable
		Lilon 21 600 mAh rechargeable	
CONSUMPTION	Standby	4 mAh / day	
	One Trackpoint + data sending	1 mAh / each position	
	Self-discharge of battery	0.4 mAh continuously (Rechargeable battery only)	
INPUTS	USB C - covered by rubber cap	Charging /report memory reading/ configuration/FW upgrade ~ sealed optionally	
SENSORS	3 dimensions G sensor	Movement detection / tilt detection / vibration histogram / G-shock	
	Other sensors	Temperature, humidity, air pressure	
WIRELESS EXTERNAL SENSOR INTERFACE	Bluetooth 5.0 long range	Range up to 500m in free space / 30m in buildings Up to 100 sensors	
INTERNAL MEMORY	Flash 512 kB	Capacity 5000 events or positions	
DIMENSIONS	Plastic box	177 x 85 x 25 mm	
TEMPERATURE RANGE	Lilon rechargeable batteries	-25 °C up to +70 °C, charging 0 °C up to +70 °C	
	LiSoc non rechargeable batteries	-35 °C up to +85 °C	
PROTECTION CLASS	IP66	Waterproof	
WEIGHT	With batteries	550 g	