

SENSORS DATASHEET

Temperature



code: T

Range	-30/+60 °C
Resolution	0.01 °C
Accuracy	± 0.2 °C (max 0.4 °C)



External Temperature



code: Text

Cable length: 2m*

Range	-30/+60 °C
Resolution	0.01 °C
Accuracy	± 0.2 °C (max 0.4 °C)



Temperature&Humidity



code: TH

Temperature sensor

Range	-30/+60 °C
Resolution	0.01 °C
Accuracy	± 0.2 °C (max 0.4 °C)

Humidity sensor

Range	0 - 100%
Resolution	0.05% RH
Accuracy	± 2% (max ± 4% RH)



External Temperature&Humidity



code: T

Cable length: 2m*

Temperature sensor

Range	-30/+60 °C
Resolution	0.01 °C
Accuracy	± 0.2 °C (max 0.4 °C)

Humidity sensor

Range	0 - 100%
Resolution	0.05% RH
Accuracy	± 2% (max ± 4% RH)



Optical Seal



code: SO

Electronic seal (based on optical sensor)



Magnetic Switch



code: SM

Magnetic switch



Pressure



code: P

Range	10/1200 mbar
Resolution	0.027 mbar
Accuracy	± 1.5 mbar (max ± 2.5 mbar)



Anti-Removal



code: AR

Digital switch
(fixed on cap)



Inclinometer



code: SR

Electronic seal
(based on 3-axis accelerometer)



TERTIUM Technology S.r.l.

Via G.B. Picotti, 8 - 56124 Pisa - Italy

Tel. +39 050 576777 - www.tertiumtechnology.com

READER DATASHEET

COMMON FEATURES

Frequency: 2.4 GHz
Power: Programmable up to 4.5 dBm
Standard: IEEE 802.15.4
Read range: 100 m in free air
Working temperature: -20 °C / +60 °C

MWS USB READER



Prod. code MWSAR_USB

INTERFACE	USB
POWER SUPPLY	5v
DIMENSIONS	Width 65 mm – Height 50 mm – Depth 37 mm
WEIGHT	70 g
PROTECTION DEGREE	IP65
	Fixed reader capable of reading 2.4 GHz active Tags, embedded antenna



MWS BT FIXED READER



Prod. code MWSAR_BT12V

INTERFACE	Bluetooth
POWER SUPPLY	12 - 24 V
DIMENSIONS	Width 65 mm – Height 50 mm – Depth 37 mm
WEIGHT	70 g
PROTECTION DEGREE	IP65
	Fixed reader capable of reading 2.4 GHz active Tags, embedded antenna, 12 V or 24 V power supply (cable not included)



MWS BT MOBILE READER



Prod. code MWSAR_BT

INTERFACE	Micro USB type B, Bluetooth
POWER SUPPLY	Li-Poly Battery 3.7 Vdc 500 mAh, rechargeable via micro USB
DIMENSIONS	Width 86 mm – Height 57 mm – Depth 15 mm
WEIGHT	60 g
PROTECTION DEGREE	IP54
	Portable reader capable of reading passive HF Tags and 2.4 GHz active Tags with Bluetooth interface, micro USB, embedded antenna, 2 LEDs, speaker



MWS GPRS READER



Prod. code MWSAR_GPRS

INTERFACE	GPRS
POWER SUPPLY	12 - 24 V
DIMENSIONS	Width 20 cm – Height 15 cm – Depth 7.7 cm
WEIGHT	790g
PROTECTION DEGREE	IP65
	Fixed reader capable of reading 2.4 GHz active Tags equipped with GPRS interface, embedded antenna, 12 V or 24 V power supply (cable not included)



STANDARD TAG LIST

COMMON FEATURES

Frequency: 2.4 GHz
Power: Programmable up to 4.5 dBm
Standard: IEEE 802.15.4
Read range: 100 m in free air
Power Supply: Non-rechargeable lithium batteries (standard CR2)
Tag Memory: 300000 log data
Working temperature: -30 °C / +60 °C
Protection degree: IP65
Dimension: Case L - W 97 mm H 62 mm D 40 mm
 Case S - W 65 H 50 D 37 mm

MWS Tag

Prod. code MWSAT

Case L	
DESCRIPTION	2.4 GHz active Tag for long-distance identification of objects or places, embedded antenna, long-life battery power supply.

MWS TagT

Prod. code MWSAT_T

Case L	
DESCRIPTION	2.4 GHz active Tag with temperature sensor, embedded antenna, datalogging capability, long-life battery power supply.

MWS TagTSo

Prod. code MWSAT_TSO

Case L	
DESCRIPTION	2.4 GHz active Tag equipped with temperature sensor and optical door opening sensor (operating as an electronic seal), embedded antenna, datalogging capability, long-life battery power supply.

MWS TagSr

Prod. code MWSAT_SR

Case S	
DESCRIPTION	2.4 GHz active Tag with inclinometer sensor for tail lift (operating as an electronic seal), embedded antenna, datalogging capability, long-life battery power supply.

MWS TagTSM

Prod. code MWSAT_TSM

Case S	
DESCRIPTION	2.4 GHz active Tag with temperature sensor and magnetic door opening sensor, embedded antenna, datalogging capability, long-life battery power supply.

MWS TagAr

Prod. code MWSAT_AR

Case S	
DESCRIPTION	2.4 GHz active Tag with anti-removal sensor of the device, embedded antenna, datalogging capability, long-life battery power supply.

MWS TagSo

Prod. code MWSAT_SO

Case S	
DESCRIPTION	2.4 GHz active Tag with optical sensor of box closed, embedded antenna, datalogging capability, long-life battery power supply.

MWS TagTH

Prod. code MWSAT_TH

Case L	
DESCRIPTION	2.4 GHz active Tag with temperature sensor, embedded antenna, datalogging capability, long-life battery power supply.



MWS TagT_{ext}



Prod. code MWSAT_Text

Case S	
DESCRIPTION	2.4 GHz active Tag with external temperature sensor, embedded antenna, datalogging capability, long-life battery power supply.

MWS TagTH_{ext}



Prod. code MWSAT_THext

Case S	
DESCRIPTION	2.4 GHz active Tag with external temperature and humidity sensors, embedded antenna, datalogging capability, long-life battery power supply.

MWS TagTT_{ext}



Prod. code MWSAT_TText

Case S	
DESCRIPTION	2.4 GHz active Tag with external temperature and local temperature sensor, embedded antenna, datalogging capability, long-life battery power supply.

MWS TagTHP



Prod. code MWSAT_THP

Case L	
DESCRIPTION	2.4 GHz active Tag with temperature, humidity and pressure sensors, embedded antenna, datalogging capability, long-life battery power supply.

OPTIONAL

MWS Fixing Plate

Prod. code MWS_FP

DESCRIPTION	Fixing plate for tags and readers, optional for special mountings.	