



## WESTICO W100 TAG

- Long lifetime battery
- Sensors of temperature, motion, humidity, shock
- Two programmable buttons
- Tamper sensor
- Robust-resistant case
- Automatic updates and wireless configuration
- Emulation UHF tag EPCglobal, Gen2
- WiFi receiver with antenna diversity

**Tag W100** is a part of Westico Visibility System and together with the Westico Visibility Platform software is used for assets and people tracking in a standard 802.11 b/g WiFi wireless network. W100 is a small battery-operated device with long battery life with flexible options for mounting on tracked objects. Rugged construction with rubber seal allows its deployment in harsh industrial environments. Automatic wireless firmware updates and configuration dramatically simplifies the management of tags in large installations.



## ■ POWER MANAGEMENT

Motion sensor is the basic element for efficient power management. If the tag is not moving, power management will switch the tag to sleep mode immediately. This contributes significantly to the extension of battery life. Depending on the frequency of signal broadcasting the battery life might reach up to 5 years.

## ■ PROGRAMMABLE BUTTONS

Tag W100 has a membrane keyboard with two buttons and two LED indicators. Buttons can be assigned to any application importance. Pressing the button is immediately transmitted to the server and the event is evaluated according to defined rules.

## ■ MULTIPLE MOUNTING OPTIONS

The design is based on the concept of base and tag. The object is attached to the base (by using screws, bolts, glue or cable ties). The tag, by means of mechanical lock fixed to its position, is inserted into the base. This concept simplifies handling with the tag, for example, when replacing the battery. Removing the tag from the base is possible only using special tools and it is very easy and fast. The violent removal of the tag of the base is protected by tamper sensor, which in this case, will immediately activate an alarm.

More tag mounting options on the tracked objects:

- Clip to belt or clothing
- Lanyard
- Glass Sucker

## ■ EPCGLOBAL SUPPORT

Tag contains support for the identification in the UHF band in the system EPCglobal, Gen 2. Tag ID can be programmed centrally by configuration management tool.

## ■ SENSORS

Tag is equipped with three sensors: motion, temperature and tamper sensors. Ultra-sensitive motion sensor provides information on whether the tracked object moves or not. Tamper detector responds to the attempted removal of the tag from a tracked object.

Westico Visibility System can serve also for an extremely efficient data collection from these sensors, particularly in the context of large-scale space and facilities. Also a very large area can be covered effectively by WiFi signal. The tags in free space are capable to communicate with access points up to a distance of 200 m.

Tag can be optionally fitted with a humidity sensor. For each sensor it is possible to define thresholds. When reaching these thresholds, the system will respond by predefined way.

If the tag is present in the WiFi network, the sensor based data collection runs in on-line mode. If the tag is out of the WiFi network, it works in the off-line mode and the data from sensors are stored in the tag memory. Whenever the tag gets into home WiFi network the data are transferred to the server.

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## TECHNICAL DATA

<b>Range</b>	
Outdoor range	200 m
Indoor range	40 m
<b>Radio</b>	
802.11 b/g	
Max. Output Power	+20 dBm / 100mW
Security	WEP, WPA1 & WPA2 Personal, EAP-TLS pro WPA1 & WPA2 Enterprise
Encryption	AES-128, RC4, MD5, SHA-1, CRC-32
<b>UHF RFID tag</b>	
EPCglobal, Gen 2, Class 1	
Frequency of Operation	866 - 868 MHz (Europe) 902 - 928 MHz (US)
<b>User Interface</b>	
2 programmable buttons 2 signal LED	
<b>Sensors</b>	
Temperature	-30°C to + 70°C / accuracy ± 2°C
Humidity*	0 to 100%, accuracy ± 3% RH
<b>Operationa Parameters</b>	
Temperature	-30°C to + 70°C
Humidity	0 to 100%, condensing
Protection Class	IP65
<b>Power Parameters</b>	
3,6 V primary lithium battery	
Battery Lifetime	1 to 5 years depending on blink rate
<b>Physical Parameters</b>	
Dimensions	80 x 50 x 19 mm
Weight including battery	53 g
<b>Certification</b>	
CE Mark	
ETSI EN 300 328	
ETSI EN 301 489-17	
ETSI EN 60950	

\* Optional