



DATASHEET LETIsmart TAG TOPBOT 12V – P/N° 7V2475.36

DID YOU KNOW...

The TOPBOT 12V TAG is the device of the innovative LETIsmart system that allows communication between LETIsmart TAGs and the white cane usually supplied to blind / visually impaired citizens integrated by the VOCE system. Bi-directional communication allows the user to receive audio information (for example address and house number, or any personalized name or phrase) from the white cane handle regarding the presence of an infrastructure (pole, building or other) equipped with the LETIsmart system, and to INTERACT with the TAG itself, ALL from the white cane. The system then allows you to activate the directional sound of the TAG to be guided to the exact point of the infrastructure (pole of the bus stop or building entrance - hospital, public office, shop, own home). The radio interface sends the encrypted communication on the 868Mhz LoRa band to make the system safe and uses a dedicated protocol to avoid overlapping between the various devices. Electronics is the result of a careful and in-depth engineering study that has led to a significant miniaturization of the electronic circuit in order to adapt it to even the smallest mechanical boxes with zero visual impact and minimum size, without affecting its weight. The TAG can be contained in many recommended containers available on the market such as the M503 flush-mounted boxes and many other ALREADY PRESENT in the systems of most buildings. It is powered at 12VDC using built-in or wall-mounted micro-power supplies. In addition, the TAG is equipped with a relay output so that the electric impulse can be activated from the blind cane to control any other compatible equipment (for example, you can open or close the home electric gate or the lights in the driveway).

ADVICE

- For a correct use, a training by a qualified Orientation and Mobility instructor is required.
- Any replacement, updates, installation or maintenance must be carried out by an authorized LETIsmart service center.

TECHNICAL FEATURES

Power supply	12VDC
Consumption (stand-by)	200mW (phrase transmission and waiting for VOCE commands)
Consumption (active)	600mW (active sound system)
Radio connection	Wireless LoRa
Transmission band	ISM – 868MHz
Connector	4-pole screw terminal connector for power supply and relay output
Relay current capacity	Vmax=40V – Imax=150mA
Relay type	Solid state relays
TAG sound system	In-circuit integrated buzzer with directional sound to reach the TAG
Buzzer volume levels	Configurable (Max 69db/m without box)
Buzzer sound frequency	2730Hz
VOCE must be set in these modes to recognize the TAG	- Urban information - Urban and commercial information
Operating temperature	-20°C, +60°C
Material (box)	Flame-resistant - UL94-HB or V0

SUPPORTED LANGUAGES



TAG LAYOUT ...

...and TYPES OF BOXES SUITABLE TO CONTAIN IT



SCALE 1:1



SCALE 1:4

COMPLIANCE

- 2014/53/EU RED relating to the making available on the market of radio equipment.
- EN 300 220-1 SRD + EN 300 220-2 V3.1.1 operating in the frequency range 25 MHz to 1 000 MHz.
- EN 301 489-1 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services.
- EN 301 489-3 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz.
- EN/IEC 62368-1:2014 +AC 2015 Audio/video, information and communication technology equipment - Part 1: Safety requirements.
- EN/IEC 62479:2010 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz).
- IPC A 610 G Class III assembly standards, ESD conformity CEI EN 61340 5 1, J STD 001 and J STD 033.
- 2015/863/EU RoHS III (leadfree) Directive.
- Reach 1907/2006/EU_reg453/2010/UE SVHC art31 Registration, Evaluation, Authorisation and Restriction of Chemicals.
- Conflict Minerals Policy Statement.