

DATASHEET **Taoglas Waste Insights™**

for Smart Waste Management



The **Taoglas Waste Insights™** solution enables real-time insights and intelligence to help your enterprize optimize your waste assets with real-time data and analytics anywhere, anytime.

- The world's most advanced waste sensor for public space waste bins
- A comprehensive, waste asset and team management platform
- A robust and integrated route and predictive management platform for your operational teams

Reduce Operational and Infrastructure Costs

- Reduction of the number of vehicles
- Reduction of the number of waste bins
- Reduction of fuel costs
- Reduction of service cost

Reduce Environmental Impact

- Reduction in CO2 emmisions
- Reduction of overflowing waste bins •
- Reduction of noise level •
- Reduction of fuel

Provide Deep Insights and Analytics

- Fleet analytics (route optimization)
- ESG and Sustainability analytics
- Material generation and volume analytics
- Resource allocation analytics









Typical Applications



Clothing



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Waste and **Recycle Bins** **Smart Cities**

Document Shredding Commerical Haulers

Construction







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Technical specifications	
Distance measurement	Ultra
Minimum distance	15 cm
Maximum distance	255 cm/high reflective commodities 170 cm/other commodities
Measurement calculation	Multi measurement with weight approximation
Temperature measurement	Yes
Weight (batteries included)	215 g
Weight (battery excluded)	165 g
Size (h/w/d)	50 mm/120 mm/54 mm
Power supply	Up to 4 years (battery duration depends on local temperature, type and position of the bin, and frequency of measurement)
Batteries voltage and capacity	3.6V, 2600 mAh
Batteries type	Lithium-thionyl chloride (Li-SOCL2)
Battery replaceable	Yes, 2 batteries type LS14500 (2 x 20 grams)
Temperature range	-40°C to + 65°C
Device class	Class A
Adaptive Data Rate	Yes
Downlink configuration	Yes
Measurement times	Up to 24 times per day
Turn on mechanism	Magnetic
Cover	Recyclable, polyamide with optical fibers
Device type	Sensor Plug'n'Play
Connectivity	NB-IoT / CAT-1 LoRaWAN or SigFox
Usage	Indoor, load carriers and containers, outdoor
Application	Distance measurement, filling level measurement
Sensors	Distance
Enclosure rating	IP66
Certifications	CE, RCM, PTCRG

Ultrasonic Sensor .

1 inch Ultrasonic sensor reads the topology of the waste in the bin.

Cone Seal

The cone seal provides an option for a cone to be retrofitted for larger bin vessels.

Hardened Plastic

Enclosure Hardened plastic enclosure allows for robust installation in harsh environments including sea salt spray locations, duty and dirty locations and all weather locations.

On/Off

By holding the magnet at this location the device will beep 5 times and turn itself on or off.

Optical Sensor

Two optical sensors for accurate optical measurements.

- Product Features
- Multi-technology sensing (Ultrasonic & Optical)
- 5m sensing distance for all bin types
- Monitors solid or liquid waste
- Emergency Alerting System (fire/tip/relocation)
- Real-time sensing of fullness
- NB-IoT / CAT-1 LoRaWAN or SigFox capable communication

IP66 Rated

washer cleaning.

Enables high pressure

- IP66 rated for harsh waste environments
- Built-in user replaceable dual Lithium-thionyl chloride
 (Li-SOCL2) batteries

<image>



Smartphone application for easy use.

For further details visit: www.taoglas.com/smart-waste

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