

# TECHNICAL DATASHEET



Works with



## iTAG X40



### iTAG X-Range worker safety tag with hybrid location technology and LoRaWAN connectivity

Accurately locate workers in hazardous areas, anytime and anywhere

Leverage GPS, Wi-Fi and BLE hybrid location technology

Uses LoRaWAN for long range data connectivity

Optional integrated access control or photo ID card

Automatic man down/fall detect alerts

ATEX and IECEx  
zone 0 and 20  
certified

Leverage LoRaWAN  
for minimal  
infrastructure  
requirements

Send alerts to  
workers who enter  
"event zones"

Uses Extronics  
Location Engine  
for "dot on a map"  
location data

Leverage hybrid  
technology for  
accurate location  
tracking

Visual audible and  
tactile call button  
alerts for workers

[www.extronics.com](http://www.extronics.com) | [info@extronics.com](mailto:info@extronics.com) | +44 (0) 1606 738 446

X130249(3)

Disclaimer: Copyright (c) Extronics Ltd. The information contained in this document is subject to change without notice. Extronics cannot be held responsible for any errors or inaccuracies within this document.

Extronics Released


## REDUCE THE AMOUNT OF WIRELESS INFRASTRUCTURE NEEDED FOR ACCURATE LOCATION

LoRaWAN is a low-power, wide area networking protocol built on top of the LoRa radio modulation technique. The Extronics iTAG X40 worker safety tags utilise LoRa connectivity and is used alongside the Extronics Location Engine (ELE).

The use of LoRaWAN allows for tag transmissions to cover longer distances compared to their Wi-Fi or BLE equivalents, meaning the wireless infrastructure requirements are significantly reduced.

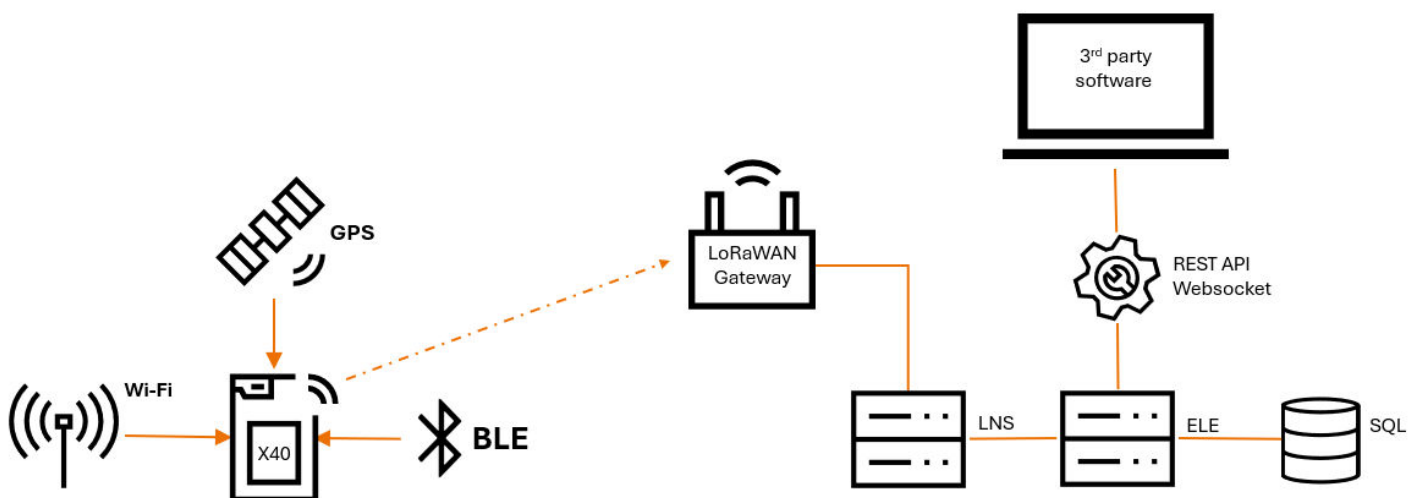
The ELE is designed to work with various LoRaWAN network servers, for example, ChirpStack or LORIIOT. Additional LNS support can be added upon request

## iTAG X-RANGE COMPARISON

					
FEATURES	iTAG X10	iTAG X20	iTAG X30	iTAG X40	iTAG XM
Unidirectional call button	✓	✓	✓	✓	✓
Support for BLE beacons	✓	✓	✓	✓	✓
Man Down		✓	✓	✓	Future update
Sound alert	✓	✓	✓	✓	✓
Vibrate alert		✓	✓	✓	✓
Pressure sensor for elevation			✓	✓	
Access control	✓	✓	✓	✓	
Certified (ATEX, IECEx, MET)	✓	✓	✓	✓	N/A
Connectivity type	Wi-Fi	Wi-Fi	Wi-Fi	LoRaWAN	Wi-Fi, Cellular
Location technology	BLE, Wi-Fi, LF	BLE, Wi-Fi, LF	BLE, GPS, Wi-Fi, LF	BLE, GPS, Wi-Fi	BLE, GPS, Wi-Fi

LF is a specific feature with Mobileview. For more information, contact Extronics.

## NETWORK TOPOLOGY



# SPECIFICATION

Hazardous area certification	 ATEX/IECEX II 1G Ex ia IIC T4 Ga II 1D Ex ia IIIC T200 147°C Da I M1 Ex ia I Ma  cMETus CI, II, III Div 1 groups A-G, T4, Ex ia CI I Zone 0 AEx ia IIC T4 Ga Zone 20 AEx ia IIIC T135°C Da Ex ia IIC T4 Ga Ex ia IIIC T135°C Da
Radio certification	EC / FCC / *
Location technology	<b>GNSS radio:</b> GPS / GLONASS / Beidou <b>WiFi Sniffing:</b> 2.4Ghz <b>BLE:</b> 2.4 GHz Eddystone Beacons
LoRaWAN frequency bands	EU868MHz, US915MHz, AS923MHz, AU915MHz
Protocol	LoRaWAN Class A
Dimensions	<b>H</b> 85mm x <b>W</b> 56mm x <b>D</b> 26mm excluding stainless steel clip <b>H</b> 95mm x <b>W</b> 56mm x <b>D</b> 38mm including stainless steel clip
Weight	<b>Tag</b> 125g <b>Charger</b> 35g
IP rating	IP66
Materials	<b>Tag housing:</b> Polycarbonate / PBT <b>Tag overmould:</b> TPU <b>Access control card cover:</b> Transparent ABS <b>Clip:</b> Stainless steel <b>Charge adapter:</b> PC / ABS <b>Charging cable:</b> PVC
User notification	<b>Activity/battery status:</b> LED Green flashing / Red flashing  <b>Emergency call button:</b> LED Red constant Vibration Buzzer  <b>Man down / Fall detection:</b> LED Red constant Vibration Buzzer <b>Note:</b> 30s period allows wearer to cancel false positive transmission  <b>Sound:</b> 90dB at 1m
Operating temperature	-20°C to +55°C
Humidity	5% to 95% RH

# SPECIFICATION



Battery	<b>Battery:</b> Rechargeable lithium Ion battery <b>Charging time:</b> 4 hours <b>Battery life:</b> Dependent on usage, examples provided on request <b>Charge adaptor:</b> USB Type A to tag 2 pin, 1m long (must use charging cable supplied and power supply conditions apply) <b>Battery capacity:</b> >80% capacity after 500 charge cycles BATTERY MUST BE CHARGED IN NON-HAZARDOUS AREA
Extronics Location Engine (ELE)	Advanced decision-making software to provide hybrid location capability.
Programmability	Program with Bluetooth and Extronics Device Manager
Updates	Firmware updates when new functionality becomes available
Warranty	1 year factory warranty

# ORDERING INFORMATION

iTAGX40

iTAG X40 hazardous area worker safety tag with hybrid location technology and LoRaWAN connectivity. Certified to ATEX, IECEx, cMETus. LoRaWAN region selected by client upon activation

*Extronics can provide the iTAG X range with an alternate front casing that accommodates a HID iClass tag and photo ID. Please add "HID" as a suffix to the part number when enquiring*

## ACCESSORIES

X124869

USB Charging Cables for iTAG X-Range Pack of 10

X124871

iTAG X-Range Photo ID covers Pack of 50

X124908

iTAG X-Range iCLASS HID Photo ID covers Pack of 50

X124873

iTAG X-Range Protective cover for call button Pack of 50

X124876

PVC Kiss Cut Blank Photo ID Card for iTAG X-Range Pack of 50

X128417

X-Range Multicharger UK

X128418

X-Range Multicharger US

X128437

X-Range Multicharger EU

X128402

Multicharger Daisy chain cable

[www.extronics.com](http://www.extronics.com) | [info@extronics.com](mailto:info@extronics.com) | +44 (0) 1606 738 446

**X130249(3)**

Disclaimer: Copyright (c) Extronics Ltd. The information contained in this document is subject to change without notice. Extronics cannot be held responsible for any errors or inaccuracies within this document.

Extronics Released