## GOBAL-Y Wi-Fi 4G Cat-M1/NB1

Compact IP-67 rugged battery-powered Wi-Fi based tracking on 4G LTE CAT-M1 and NB-IoT networks





## **APPLICATIONS**



Non-powered asset tracking



Equipment locate and recovery



Indoor Tracking



Anchoring and security of assets



Pallets and parcels

The GLOBAL-Y is a compact, battery-powered, IP67 tracking device. Perfect for mounting to small assets or in a concealed location.

The device uses a Wi-Fi 'sniffer' to detect nearby access points and the received signal strength. These values can be used to triangulate position allowing for **indoor tracking** 

## **FEATURES**

- Operates on LTE CAT-M1 and NB-IoT networks around the world
- Wi-Fi Positioning System (WPS)
- Long battery life up to 3 years
- 3D Accelerometer
- Small size, IP67 Rated
- Uses 3 x AAA off-the-shelf replaceable batteries
- After hours movement/activity alerts
- Easy to install simply "place-n-trace"
- Easy to conceal
- Suitable for livestock, pallets, kegs, tools, people, packages, bins, containers etc...

	MECHANICAL SPECIFICATIONS
Compact Housing	The GLOBAL-Y comes in a compact IP67 rated housing (waterproof) that is UV stable and rugged
Dimensions	L 85 x W 63 x H 24mm
Operating Temperature	-20°C to +60°C
	Board and housing, ensure your batteries are rated to withstand the conditions of the application
	POWER
Batteries	The GLOBAL-Y uses 3 x AAA 1.5V lithium batteries which are available at supermarkets / hardware stores
Battery Life	Up to 3 years depending on settings
Max Input Voltage	6V maximum
Sleep current	3uA
	OTHER
Internal Memory	Sufficient memory to store over 25,000 records.  Normally data is sent to the server immediately but if the device is out of range there is space to ensure no data is lost
3-axis accelerometer	The 3-axis accelerometer allows the GLOBAL-Y to 'sleep' in an ultra-low power state yet still wakeup when movement occurs. It can also detect high-G events and after-hours activity.

CONNECTIVITY		
SIM Size	Nano (4FF) size cellular SIM card	
2G or 4G	The GLOBAL-Y can be manufactured for specific markets around the world	
2G Modem	2G: SARA-G350-02S-01 850/900/1800/1900 MHz	
4G Modem	uBlox SARA-R410M Modem operates on all major global LTE-Cat-M1 and NB-IoT bands. These new low-power networks are specifically designed for IoT applications, providing great battery life	
	Supported LTE bands: 1-5, 6, 8, 12, 13, 17, 19, 20, 25, 26, 28	
WI-FI TRACKING		
Wi-Fi Positioning System (WPS)	The GLOBAL-Y Wi-Fi uses a Wi-Fi 'sniffer' to scan for Wi-Fi access points and the signal strength from each one.  This information is then used to triangulate a position which is typically accurate to 100 ft / 30m in metropolitan areas. And this can all be done in typically less than 3 seconds, using a lot less power than a typical GPS fix.	
	Even the best GPS will not perform well indoors (such as in a warehouse), whereas Wi-Fi access points can be detected.	

	FIRMWARE SMARTS
Adaptive Tracking	Adaptive-Tracking technology enables the accelerometer and Wi-Fi data to be used intelligently to work out if it is moving and to send frequent updates, as well as to scale the update rate down to once per day if the asset is stationary to preserve battery life
OTA Configuration	The GLOBAL-Y can be remotely configured and updated OTA (over the air). Device management is performed from Digital Matter's OEM Server device management platform.
AES-256 Security	The GLOBAL-Y uses bank-level AES-256 device authentication and data encryption to ensure that your data is kept private and secure
Recovery Mode	The GLOBAL-Y can be remotely switched into Recovery Mode which switches the device to do live tracking and reporting – so that you can get your asset back!
G-Force Events	The 3D accelerometer optionally enables harsh G-force detection (like assets being dropped or involved in accidents) and reports these to the server.
Geo-Fences	The GLOBAL-Y has the capacity to hold hundreds of geo-fences that can be downloaded to it from the server and updated Over-The-Air. A future firmware version will enable alerts to be sent to the server upon entering or leaving a geo-fence.
After Hours	The GLOBAL-Y can be set to alert on after-hours activity, and to use alternate logging parameters

## **Man Down**

The GLOBAL-Y can be configured to send an alert to the server when the device has not moved for a set amount of time. Handy for livestock, shipments etc.



