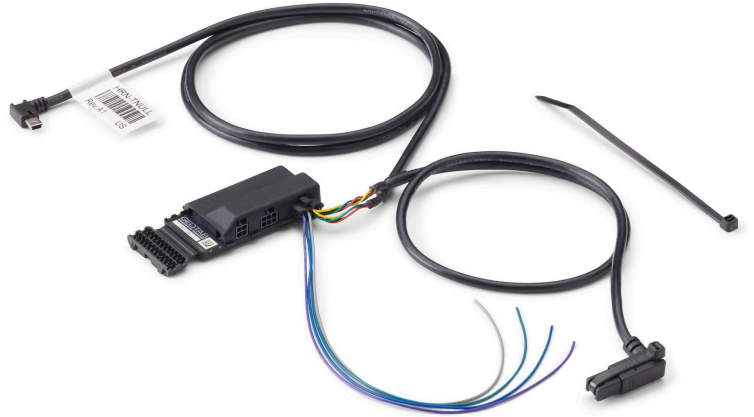


IOX-UREADER

For the most up-to-date version, please visit: <https://gtb.link/MXGF>

The IOX-UREADER is a multipurpose IOX™ that supports Tachograph, Contactless CAN Clamp, and Cold Chain transportation data logging functionality.



Key Features

Geotab Truck Solution (Tachograph)

- Automated remote download of vehicle and driver information.
- Automatic driver identification that matches the individual driver with a specific vehicle – improving report accuracy on the MyGeotab™ platform.
- Automated downloads occur at regularly scheduled intervals or as needed on demand (in accordance with the technical and legal requirements set by the European Union).
- Sends real-time Tachograph data, including driver name, driver status, and other useful information (in accordance with the technical and legal requirements set by the European Union).

Refer to the [Installation with a Tachograph](#) section of the IOX-UREADER Installation Guide for more information.

Contactless CAN Clamp

- Allows the connection to the vehicle's CAN bus using a capacitive clamp to read vehicle engine data without electrical contact; therefore preventing vehicle interference.
- Automatically detects polarity, baud rate, and CAN bus protocol without the need for configuration.
- Recommended as a way to extend support of engine data and provide access to vehicle data when such data is not available via the diagnostic port, or a diagnostic port is not present in the vehicle. The IOX-UREADER [vehicle support list](#) contains the most up-to-date support information for vehicle support via CAN Clamp.

Refer to the [CAN BUS Clamp Installation](#) section of the IOX-UREADER Installation Guide for more information.

Cold Chain

- Real-time temperature monitoring, proof of delivery, custom alerts and reporting.
- Error code detection and custom alerts to fleet managers.
- Remote temperature setting.
- Remote fault clearing.
- This feature is only applicable for assets operating in the UK and Europe.

Refer to the [Cold Chain Installation](#) section of the IOX-UREADER Installation Guide for more information.

Cold Chain Supported Features

Refrigeration Units

The following tables list all refrigeration unit features and controllers that are currently supported by IOX-UREADER devices:

Manufacturer Controller Model	Thermo King ThermoGuard	Thermo King Smart Reefer	Carrier Advanced Vector	Carrier Standard Supra/Ultra/Maxima	Carrier Vector HE 19	HWASUNG	Thermo King DSR	GAH/LAE	Carrier Xarios/ Pulsor	Carrier Neos/Zephyr/Viento
Return temperature	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zones supported	1	3	2	3	3	2	2	1	1	1
Ambient temperature	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗
Discharge temperature	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗
Evaporator temperature	✓	✓	✓	✗	✓	✗	✗	✓	✗	✗
Setpoint temperature	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Door probe ⁴	✗	✓	✓	✓	✓	✗	✓	✓	✓	✗
Diesel/Electric mode	✗	✓	✓	✓	✓	✗	✗	✗	✗	✗
Power switch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Engine RPM	✓	✓	✓	✗	✓	✗	✗	✗	✗	✗
Total hours ³	✗	✓	✗	✗	✓	✗	✓	✗	✗	✗
Engine hours ³	✗	✓	✓	✗	✗	✗	✓	✗	✗	✗
Electric hours ³	✗	✓	✗	✗	✗	✗	✓	✗	✗	✗
ON hours ³	✗	✓	✓	✗	✗	✗	✗	✗	✗	✗
Auto/Manual mode	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗
Engine temperature	✗	✓	✓	✓	✓	✗	✗	✗	✗	✗

Serial number	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗
License plate	✓ ¹	✓	✓	✓	✓	✗	✗	✗	✗	✗
Fuel level ⁴	✗	✓	✓	✗	✓	✗	✗	✗	✗	✗
Machine type	✓	✓	✗	✗	✓	✗	✓	✗	✗	✗
Battery voltage ²	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗
Alarms	✓	✓	✓	✓	✓	✗	✓	✓	✗	✗
Remote Setpoint adjustment	✓	✓	✓	✗	✗	✗	✗	✓	✗	✗
Auto/Manual configuration	✗	✓	✓	✗	✗	✗	✗	✗	✗	✗
Remote Alarm clearing	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗
Remote start/stop ⁵	✗	✗ ⁵	✗	✗	✗	✗	✗	✗	✗	✗

¹ Serial number and license plate is not supported for modules using TG-VI controller.

² Battery voltage is obtained from the refrigeration unit. If the battery voltage is not available, use the GO device voltage available in MyGeotab.

³ Only a single time value can be stored at a time (Total Hours, Engine Hours, Electrical Hours, or ON Hours).

⁴ Only available if a sensor is connected to the refrigeration unit.

⁵ This function is supported via firmware. The hardware connectivity is still being implemented.

Thermographs

The table below lists all Thermograph features and controls that are currently supported by IOX-UREADER devices.

Manufacturer	Models	Temperature zones	Number of telemetries	Serial number	License plate
Thermo King	TKDL-PRO, TKDL-SPR, TKDL-DCS	4	4	✓	✓
Thermo King	TouchLog/TouchPrint	6	4	✓	✓
Carrier Transicold	Datacold 250, 300, 500	4	4	✓	✓
Transcan	2 ADR, Sentinel, Advance	4	4	✓	✓
Euroscan	Euroscan X1, X2	4	4	✓	✓
Grupo Buscalia	Thermotrans	4	✗	✓	✓
Carrier Transicold	Datacold 600	6	✗	✓	✓
Orbcomm	Euroscan X3	6	✗	✓	✓
Made Sistemi	REC96	3	2	✗	✗
Apache	Cold Tracer	6	4	✓	✗

Hardware Technical Specifications

The IOX-UREADER kit consists of two parts:

- uReaderFMS
- Either IOX-NULL or HRN-TNULL

*** NOTE:** Both IOX-NULL and HRN-TNULL perform exactly the same function. IOX-NULL is currently end-of-life and will be replaced by HRN-TNULL.

uReaderFMS with IOX-NULL:



uReaderFMS with HRN-TNULL:



Weight	24.0 g (0.05 lb)
Size	Overall length: 72 mm L Widest point: 35 mm W × 17 mm H
Housing	PP Random Copolymer: Moplen RP348R (Natural) Jet Black – Universal
Interfaces	CAN: 500 kbps (for daisy chaining)
Nominal Input Voltage	12 V / 24 V
Power/Current Rating	Active < 240 mW (20 mA @ 12 V - 10 mA @ 24 V) Sleep < 70 mW (config. down to 20 mW)
Temperature Rating	-40 °C to +85 °C

Connectors	Port A: Molex 43045-0409 (4-pin connector) Port B: Molex 43045-0609 (6-pin connector)
Compatible Devices	G09® (firmware version x.31+)
Visual status	TriColor LED, traffic light-like, indicates general status

Installation Instructions

For complete installation instructions, refer to the [IOX-UREADER - Installation Guide \[PUB\]](#).

Important Safety Information and Limitations of Use

For the latest version of Limitations of Use, please visit: goo.gl/k6Fp0w.

WARNING! Do not attempt to install, configure, or remove any product from any vehicle while the vehicle is in motion or otherwise in operation. All installation, configuration or removal must be done only in stationary vehicles which are securely parked. Attempting to service units while being operated could result in malfunctions or accidents, leading to death or serious personal injury.

WARNING! All in-vehicle devices and related cabling must be securely fastened and kept clear of all vehicle controls, including gas, brake, and clutch pedals. You must inspect devices and cabling on a regular basis to ensure all devices and cabling continue to be securely attached. Loose cabling or devices may impede the use of vehicle controls, resulting in unanticipated acceleration, braking or other loss of vehicle control, which could lead to death or serious personal injury. Improperly fastened in-vehicle devices may detach and impact operators upon sudden acceleration or deceleration, which may cause injury.

WARNING! If at any point after an in-vehicle device is installed a warning light illuminates on the vehicle dash or the vehicle stalls or has a marked drop in performance, turn off the engine, remove the device, and contact your Partner. Continuing to operate a vehicle with these symptoms can cause loss of vehicle control, and serious injury.

WARNING! Your in-vehicle devices must be kept clear of debris, water, and other environmental contaminants. Failure to do so may result in units malfunctioning or short-circuiting that can lead to a fire hazard or vehicle damage or serious injury.

WARNING! Do not attempt to remove the devices from the vehicle in which they are originally installed for installation in another vehicle. Not all vehicles share compatibility, and doing so may result in unexpected interactions with your vehicle, including sudden loss of power or shutdown of the vehicle's engine while in operation or cause your vehicle to operate poorly or erratically and cause death or serious injury and/or vehicle damage.

WARNING! Cancer and Reproductive Harm – www.P65Warnings.ca.gov.

NOTICE: This product does not contain any user-serviceable parts. Configuration, servicing, and repairs must only be made by an authorized Partner or Installer. Unauthorized servicing of these products will void your product warranty.

Regulatory Statements

USA

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

*** NOTE:** This equipment is tested and complies with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

CANADA

CAN ICES-003 (A) / NMB-003 (A)

GERMANY

Wir besitzen keine Versand- und Lagerfläche in Deutschland und sind nicht von der Rücknahmepflicht nach § 17 ElektroG betroffen.