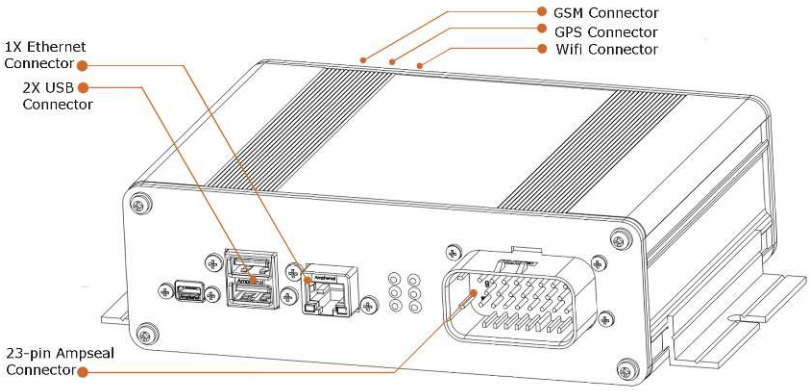
DataHub specifications



DataHub specifications		
SYSTEM	CPU	800 MHz 2core ARM processor (i.MX6)
	RAM	1 GB DDR3
	On-board memory	8GB (eMMC)
	System sensors	GPS sensor Gyro sensor 3 axis accelerometer
	Operating system	Embedded Linux
COMMUNICATION	Ethernet	100Mb/s
	Wireless	Wi-Fi 802.11 a/b/g/n (2.4 GHz)
	Cellular	GSM/UMTS/LTE (2G/3G/4G)
CONNECTORS	TE connectivity, Ampseal (23 pins)	1 x RS485 6 x analog inputs (0-10 V) 2 x analog outputs (0-10 V) 5 x digital outputs 2 x CAN
	LAN connector	1 x RJ45
	USB	2 x USB 2.0
	Antenna connectors	1 x WLAN (SMA) 1 x 2G/3G/4G antenna (FME) 1 x GPS (SMA)
OTHER	Dimensions (L x W x H) (excl. mounting brackets)	169 x 118 x 53 mm (6.6 x 4.6 x 52 in)
	Weight	500 g (17.6 oz)
	Operating temperature	-40 °C to +60 °C (-40°F to 140°F)
	LEDs	6x RGB
CERTIFICATION	Automotive standards Environmental standards CE	R_10_C5 Addendum 9: Regulation No. 10 J1455:2017 Part 2-64 IP 65 EN 301 489-1 V2.2.0 EN 301 489-50 V2.2.0 EN 301 489-52 V1.1.0 ETSI EN 300 440 V2.1.1.

		FUNCTIONS	ADVANTAGES
OPERATING SYSTEM	Embedded Linux	+ Failover Root FS + Updates over the air + Automatic recovery + Supports the Application Layer	+ Fast boot times + Remotely updatable and always in compliance with highest security standards + No data loss while rolling out updates
	Advanced power management	+ Wake on CAN + Ignition (12/24V input)	+ Crash-resilient due to automatic recovery + Online status guarantees continuous monitoring
	Wake up devices CAN or any other I/O	+ Remote configuration + Security updates	Being able to remotely control other devices
APPLICATION LAYER	Container-based app layer	+ Update, maintain, deploy, remove and configure apps remotely + Makes CAN devices, onboard sensors and I/O available in your apps	+ Easy development that can be done anywhere + Stay online while configuring and deploying apps + Use remote CAN commands to help better vehicle operation
	App deployer	Develop your own app for your DataHub	Being able to customize your DataHub
	Security layer	2048-bit encrypted connectivity	Ensures safe data transfers and protects your vehicle data
POWER CONSUMPTION	+ Full load: 5 W + Stand-by: <0.1 W + Input range: 9 – 32V	Manages power supply according to need	Never depletes your batteries
SENSOR NETWORK	+ GPS sensor + 3 axis accelerometer + Gyro sensor	+ Automatic GPS-based time synchronization + Provides precise vehicle motion and altitude by combining information from all sensors	+ Aware of vehicle position at all times in mountain areas + Always be synced with correct time
DETAILS	Dimensions (L x W x H)	169 x 118 x 53 mm (6.6 x 4.6 x 52 in) (excl. mounting brackets)	+ Small footprint + Easy to install, single plug + System runs under extreme temperatures
	Weight	500 g (17.6 oz)	
	Housing	Aluminum	
	Operating	-40°C to +60°C (-40°F to 140°F)	

AUTOMOTIVE STANDARDS	**R_10_C5 Addendum 9: Regulation No. 10** DataHub is developed specifically for the automotive industry.
ENVIRONMENTAL STANDARDS	**J1455:2017** Surface Vehicle Recommended Practice Part 2-64: Tests – Test Fh: Vibration broadband random and guidance.
	Ingress Protection 65 Dust proof and protected and wash/down capable.
EC EUROPEAN CONFORMITY	**EN 301 489-1 V2.2.0** **Electromagnetic compatibility standard for radio equipment and services** Common technical requirements.
	EN 301 489-50 V2.2.0 **Electromagnetic compatibility standard for radio equipment and services** Specific conditions for Cellular Communication Base Station (BS), repeater and ancillary equipment.
	EN 301 489-52 V1.1.0 **Electromagnetic compatibility standard for radio equipment and services** Specific conditions for Cellular Communication Mobile and portable (UE) radio and ancillary equipment.
	ETSI EN 300 440 V2.1.1 Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range.