

## Data Collection Unit (DCU)



DCU with input/output cable



DCU with battery pack removed

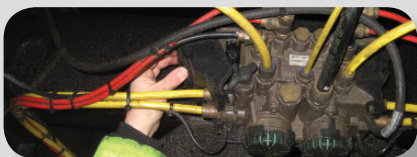


DCU and mounting bracket

### Key features and benefits

- TrailerMASTER goes beyond GPS; multiple location technologies can be called upon to calculate the trailer's position.
- Integration with the trailer's Electronic Braking System (EBS) means you can access a wide set of data from your trailer including trailer weight, odometer and roll-stability interventions.
- The DCU will typically integrate with Haldex, Wabco and Knorr Bremse systems. These systems can also provide power to the DCU.
- An external power source means the DCU is available to re-configure at any time. More operational data on a more frequent basis will provide sophisticated management reports.
- Data is sent by GSM/GPRS giving near global coverage and is used by over 3 billion people and more than 212 countries and territories worldwide.
- Fitted with a 433Mhz transceiver, the DCU offers the capability to monitor external sensors such as door status or tyre pressure.
- The DCU can be configured to report by timed interval, by time-of-day, upon detection of motion and/or by the external interfaces. There are 1000's of different combinations; Axscend's experts will help you get set up.
- Configuration of the DCU is done remotely from [www.axscend.com](http://www.axscend.com).
- The robust DCU enclosure has been built to withstand tough environmental conditions and goes beyond industry standards.

### How DCU is fitted



Remove cover from EBS



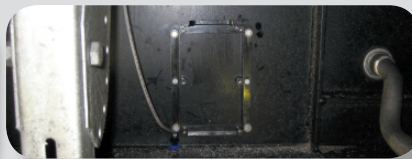
Locate EBS input socket



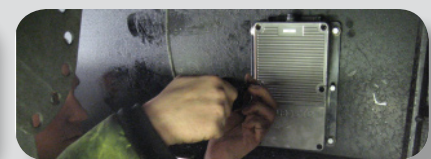
Insert trailerMASTER plug



Typically the EBS will be Haldex, Wabco and Knorr Bremse



Mounting bracket is bolted to the trailer



DCU screws into the mounting bracket

# Technical Specification

## GPS PERFORMANCE (50 CHANNEL)

RF Reception Sensitivity:	-160 dBm tracking -143 dBm acquisition
Signal Acquisition Hot:	< 1 sec
Warm:	< 32 sec
Cold:	< 32 sec
Re-acquisition:	< 0.5 sec

## ACCURACY

Position Outdoor:	< 2.5m
Velocity (Outdoor):	< 0.1ms-1

## GSM/GPRS PERFORMANCE (Quad Band)

GPRS Class 10:	Max 85.6 kbps
GSM phase 2/2+ compliant	
Output Power GSM850/900	2W
Output Power GSM1800/1900	1W

## POSITION FIXES STORED

(In Internal Memory) Up to 4,000 events

## PHYSICAL

DCU Dimensions:	207mm (L) x 118mm (W) x 34mm (H)
Mounting Bracket Dimensions:	211mm (L) x 150mm (W) x 15mm (H)
Weight:	360g
Enclosure:	Polycarbonate / ABS

## ENVIRONMENTAL

Operating / Storage Temp:	-20°C to +60°C / -40°C to +85°C
Dust / Water Ingress Protection:	Sealed to IP69K
Chemical Resistance:	Resists salt spray and most fluids used in industrial applications

## POWER

Internal Battery:	Lithium Ion
Charging requirements	12-32V, 1.5A max.

## POWER EFFICIENCY

Fast Charging Capability	< 3 hrs at 1.5Ah from flat
Low Self-discharge	< 1% over 12 months

## ALARMS

Motion:	> 0.25G
Temperature:	+/- 2°C
Geo-Fencing:	
Battery Low:	
Input-triggered Alarms Enabled by Web Data Portal	

## INTERFACES

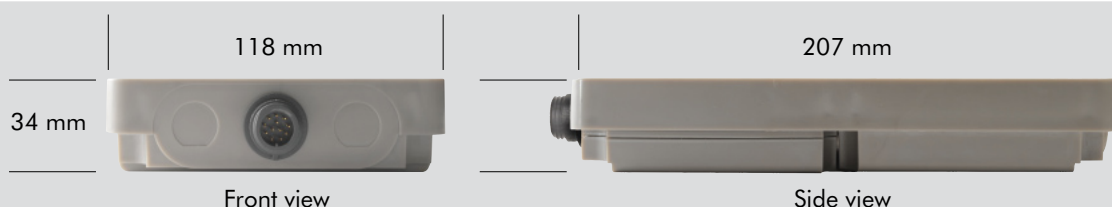
Inputs:	3 x dry contact inputs, Ignition sense
CANbus:	J1939, ISO11898
Serial port:	RS232
Wireless:	433Mhz transceiver
Power input:	12 – 32V DC
Connector:	12-way Buccaneer Inline
Cables:	12-core 30 cm OLFLEX to support Power, Gnd, I/O's (N.B. Different cable lengths and input configurations available to order)
Web Interface:	Enables remote monitoring & configuration of trailerMASTER over the web

## OPTIONS/ACCESSORIES

Cables, Cable Harnesses, Hardwired and Wireless interfaces are available to support trailerMASTER. Please contact Axscend for further information.

## CERTIFICATIONS

CE, E-Mark



This specification is subject to change without notice.