

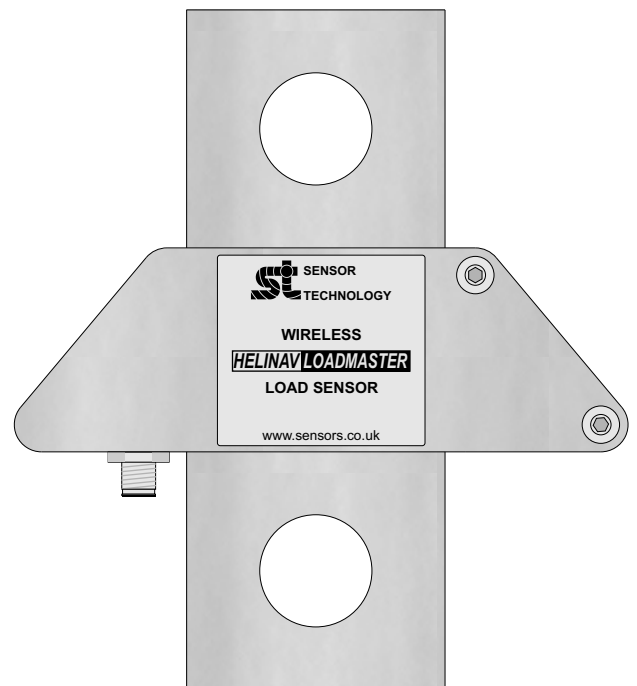
Wireless **HELINAV LOADMASTER** Load Sensor

The wireless **HELINAV LOADMASTER** Load Sensor is an aerospace qualified strain gauge based stainless steel tension type sensor. It has the capability of wirelessly transmitting its data to one of our compatible readouts and displays or recording its data locally. Its inbuilt 32MBit memory can hold up to 149 hours of data which can then be downloaded to a PC via its USB cable. The Load Sensor transmits using the worldwide licence free frequency of 2.4Ghz on two built in antennas.

The **HELINAV LOADMASTER** Load Sensor is also compatible with our **LOADSENSE** HandHeld Receiver which can read several devices at the same time, (see data sheet WLS3626R for more details), and our stand alone Receiver Interface which can be used to output the data via RS232/RS422, (see data sheet HLM3598R for more details) or if used with our portable screen display (data sheet HLM3641R) it can be used for very advanced features using our software for GPS track guidance as well as more advanced load and firefighting capabilities.

Benefits

- Wireless, so easy to install and remove between installations
- Transmits data up to a distance of 30M
- Transmits data at up to 10 times a second
- Internal Memory for up to 149 hours of data
- USB or 5V to 28V external supply chargeable
- Connect to PC via USB
- PC software for customer settings
- Flexible automatic shutdown to conserve battery
- Dual ruggedised internal antennas



Technology

The **HELINAV LOADMASTER** Load Sensor works in the worldwide harmonized band of 2.4 GHz so does not require a licence to operate and uses advanced technologies to enable data to be sent and received error free, these include, forward error correcting and data whitening.

Technical Data

| | |
|-------------------|---------------|
| Nominal Load | 1,3,5,10 Ton |
| Accuracy | ± 0.25% |
| Max Overload | 150% |
| Breaking Load | > 300% |
| Temp Coef of Zero | 0.05% Deg C |
| Temp Coef of Span | ± 0.01% Deg C |

| | |
|--------------------------|-----------------------------|
| Environmental Protection | IP65 |
| Weight | 5 Kg |
| Materials | Stainless Steel / Aluminium |
| Operating Temp Range | -10°C to + 50°C |
| Storage Temp Range | -20°C to + 60°C |
| Internal memory | 32 Mbit |

RF

| | | | |
|-------------------------------|-------------------------------------|-------------|--------------|
| Transmitter Output Power EIRP | +10 dBm | | |
| Frequency Range | 2425 - 2430 MHz | 20 Channels | 250kHz steps |
| Modulation | MSK | | |
| Data Rate | 250Kbps | | |
| Antenna | Dual patch antennas | | |
| RFI / EMC | To EN301-489 1, FCC Part 15 pending | | |

Power Input

Battery

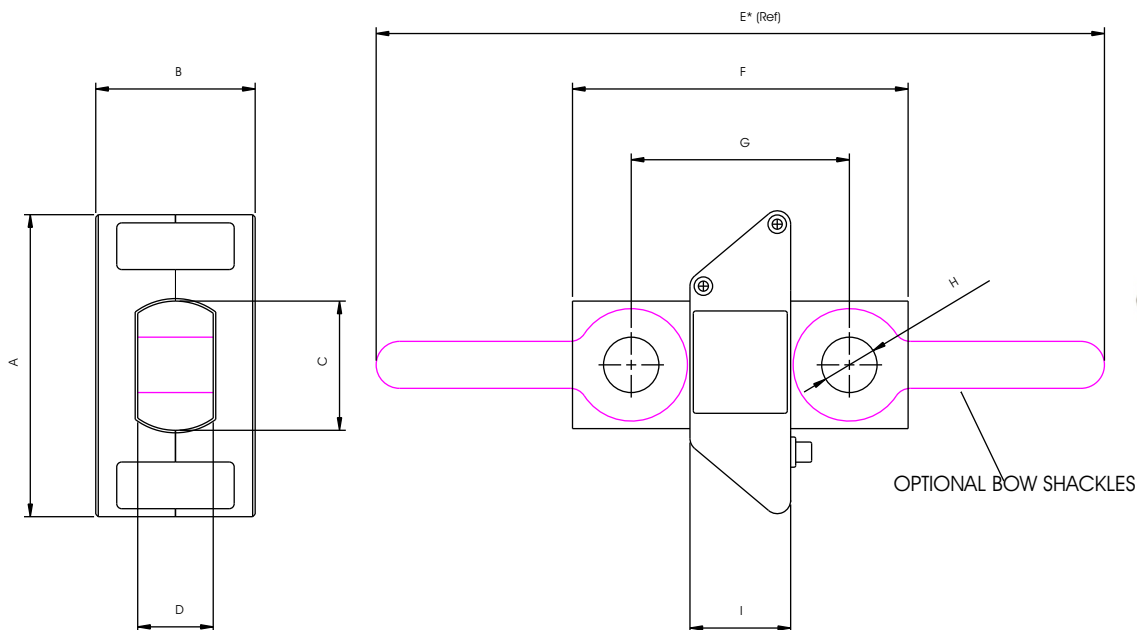
| | |
|--------------------|------------------------|
| Type | Li-Ion Varta LIC18650 |
| Voltage | 3.7V 2200mAH |
| Data transmit rate | Operating time at 20°C |
| 1 / Sec | 1000 Hours + |
| 10 / Sec | 120 Hours |

Charge Facilities

| | | |
|--|----------|----------------|
| Connector | USB | External Power |
| Voltage | 5V | 5V - 28V |
| Charge time (from complete discharge) | 33 hours | 3 hours |

Lead for USB charging, data transfer and external power input is provided.

Mechanical Data



| FSD | A | B | C | D | F | G | H | I |
|--------|--------|-------|-------|-------|--------|--------|-------|-------|
| 1 Ton | 180.00 | 95.00 | 76.00 | 45.00 | 200.00 | 130.00 | 33.00 | 60.00 |
| 3 Ton | 180.00 | 95.00 | 76.00 | 45.00 | 200.00 | 130.00 | 33.00 | 60.00 |
| 5 Ton | 180.00 | 95.00 | 76.00 | 45.00 | 200.00 | 130.00 | 33.00 | 60.00 |
| 10 Ton | 180.00 | 95.00 | 76.00 | 45.00 | 200.00 | 130.00 | 33.00 | 60.00 |

E* Length is dependant on shackle used

Sensor Technology Ltd reserves the right to change specification and dimensions without notice.