

# HELINAV LOADMASTER

## Wireless Load Sensor

The wireless **HELINAV LOADMASTER** Load Sensor is a 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 internally. Its inbuilt 32MBit memory can hold up to 280 hours of data which can then be downloaded to a PC via its USB cable. The **HELINAV LOADMASTER** Load Sensor works in the worldwide harmonized band of 2.4 GHz using two built-in antennas 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.

The **HELINAV LOADMASTER** Load Sensor is also compatible with our **HELINAV LOADMASTER** Handheld Receiver which can read several devices at the same time, (see data sheet HLM3597R 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 7" touchscreen display (data sheet HLM3732R) it can be used for very advanced features using our software for GPS track guidance as well as more advanced load capabilities. The Load Sensor display (HLM3751R) is able to display a simple load value in multiple formats, which are user selectable.

### Benefits

- Wireless, so easy to install and remove between aircraft
- Transmits data up to a distance of 100m
- Transmits data at up to 10 times a second
- Internal Memory for up to 280 hours of data
- 11-28V external supply chargeable
- Connect to PC via USB
- PC software for customer settings
- Flexible automatic shutdown to conserve battery
- Dual ruggedised internal antennas
- FCC Part 15
- Import data into Excel



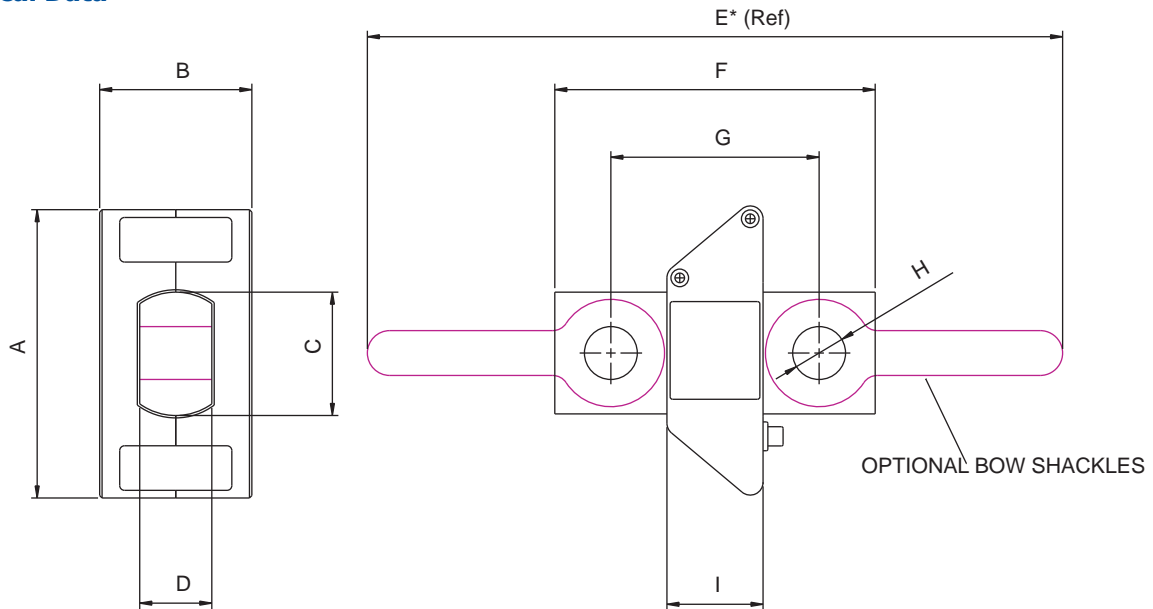
Apollo Park, Ironstone Lane, Wroxtton,  
Banbury, Oxfordshire, OX15 6AY, UK

Tel: +44 (0)1869 238400  
Fax: +44 (0)1869 238401  
Email: [info@helinav.com](mailto:info@helinav.com)

[WWW.HELINAV.COM](http://WWW.HELINAV.COM)



## Mechanical Data



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

E\* Length is dependant on shackle used

## Technical Data

Nominal Load	1,3,5,10 Tonne
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, RSS

## 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	External Power
Voltage	11-28V
Charge time (from complete discharge)	3 hours

Lead for data transfer and external power input is provided.

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