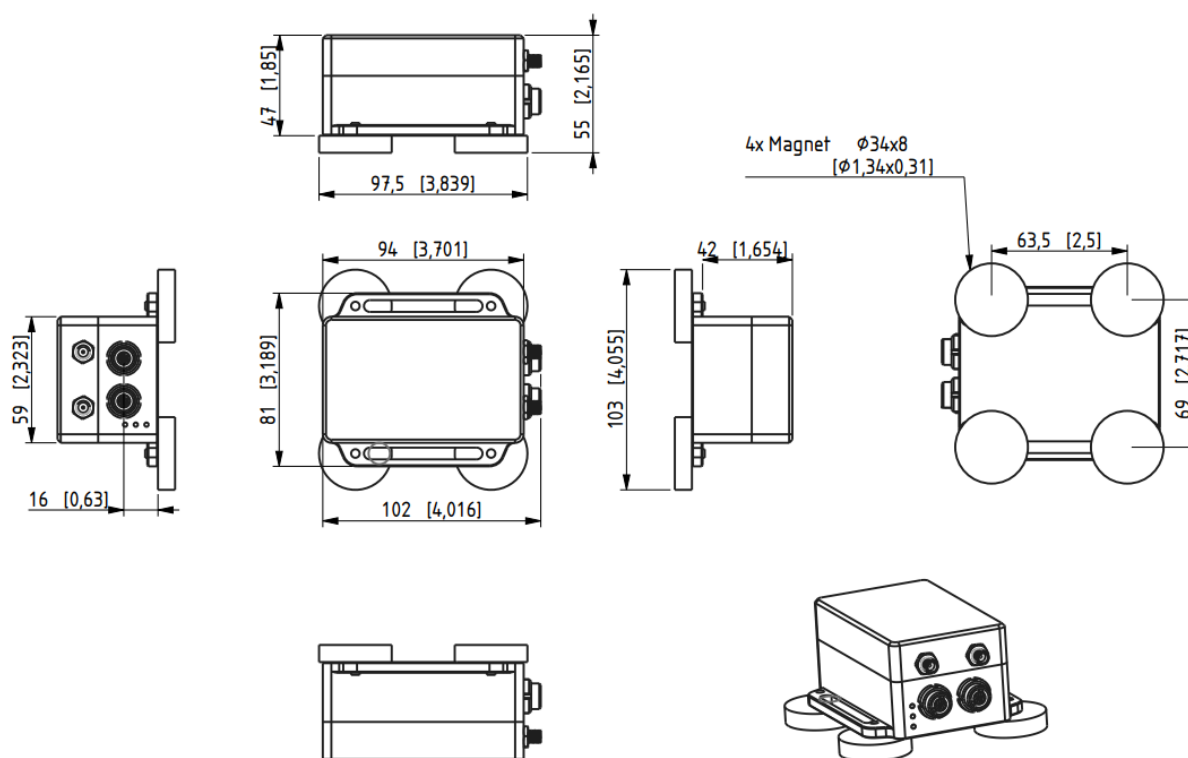


5.2.1. Sensor Specifications

PARAMETERS	GYROSCOPES	ACCELEROMETERS
Range	+/- 490 deg/s in all axes	+/- 16g in all axes
Bias repeatability	90 °/h (1σ)	2 mg (1σ)
Bias in-run stability	5 °/hr (1σ)	0.03 mg (1σ)
Random walk	0.25 °/√hr	0.03 m/s/√hr
Bandwidth	200Hz at 90° phase, 400Hz at -3dB (Output frequency dependent)	200Hz at 90° phase, 400Hz at -3dB (Output frequency dependent)
Scale Factor Repeatability	1400 ppm (1σ)	500 ¹ ppm (1σ)

5.3. Mechanical drawings



NOTES:
- Dimensions mm [inch]

Image 15: Drawing of NAVION i2 v2 instrument magnet mounting

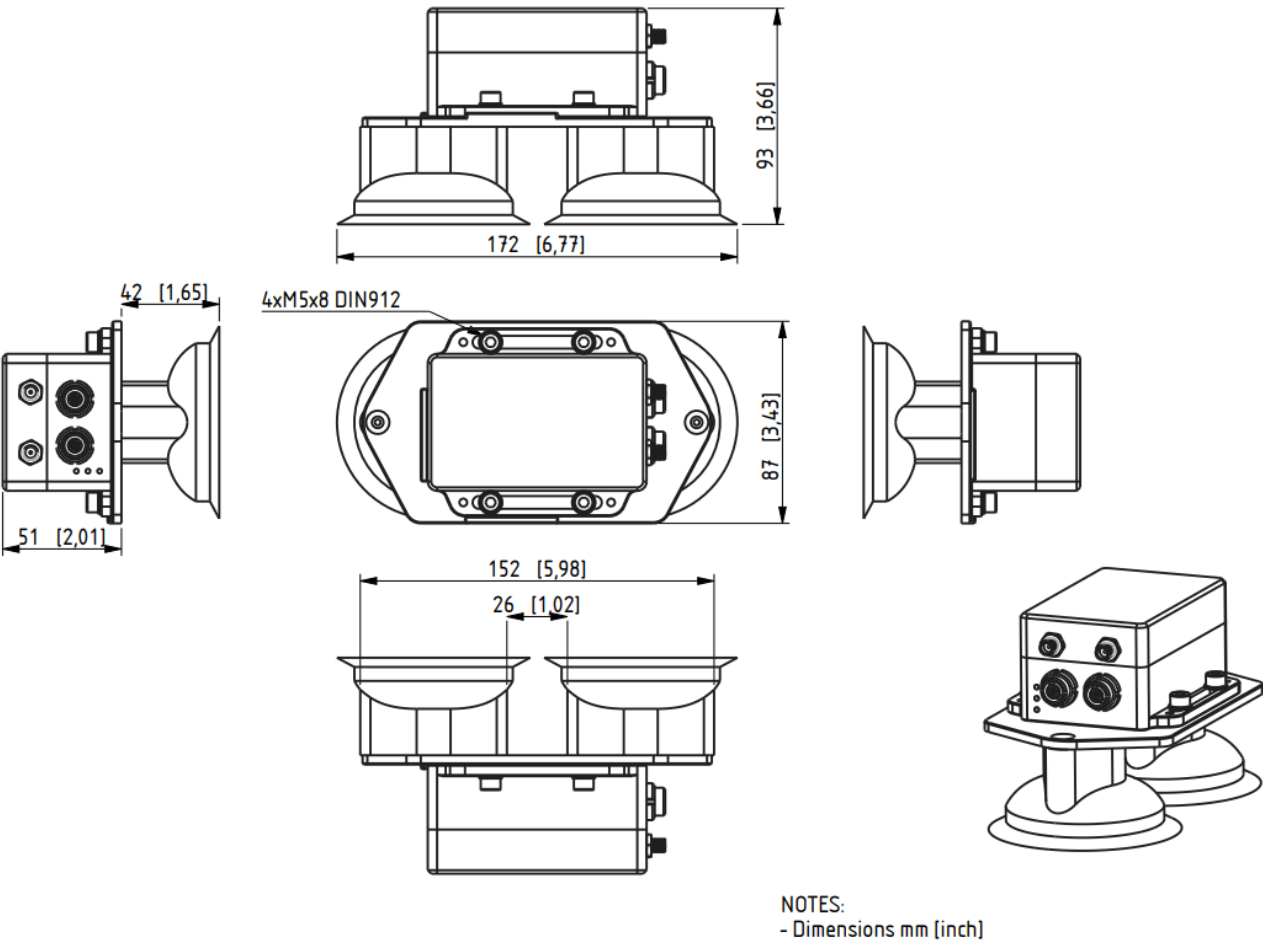


Image 16: Drawing of NAVION i2 instrument suction cups mounting

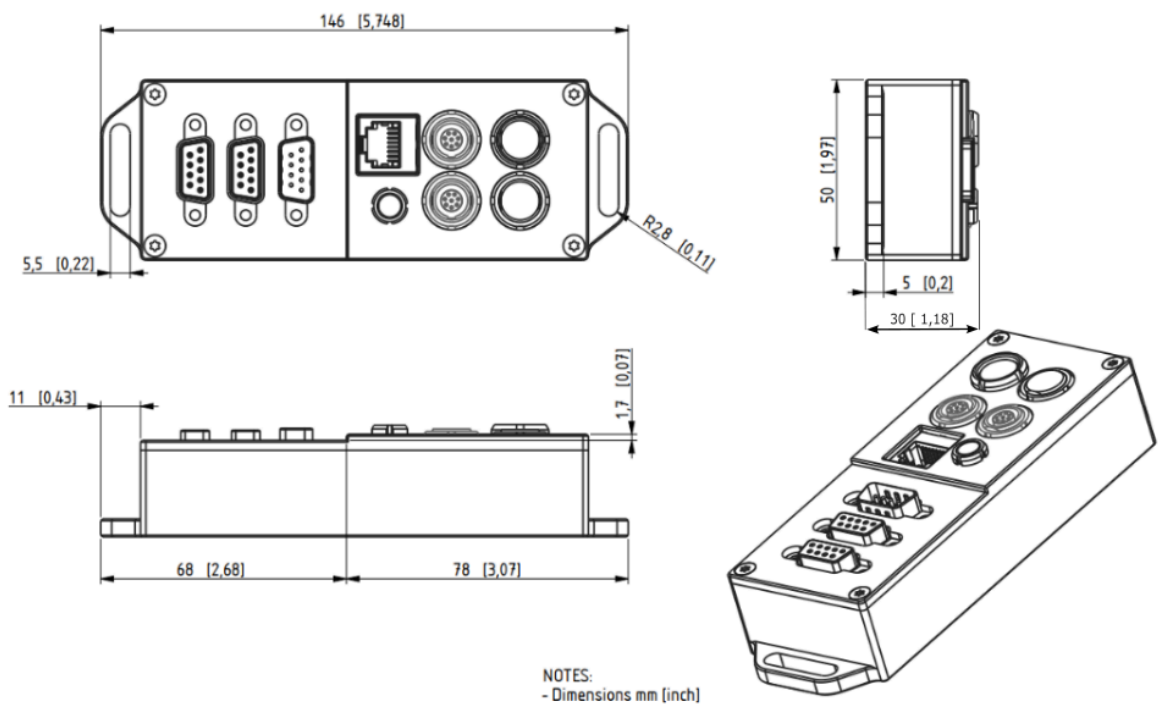


Image 17: Drawing of NAVION i2 Connection box

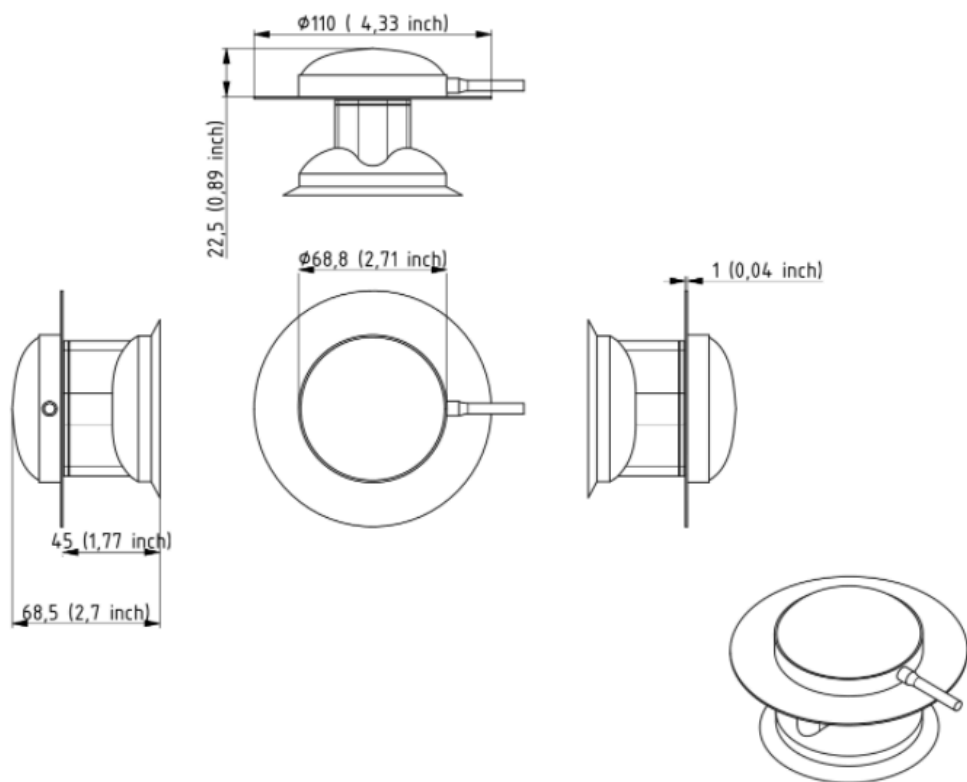


Image 18: Drawing of Gps antenna with suction cup mounting

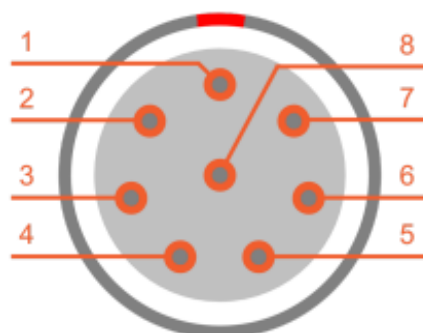
6. Connectors pinout

6.1. Break-Out box

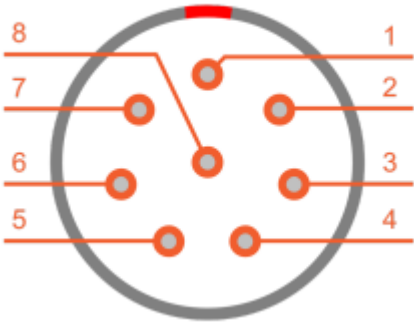


Image 19: NAVION i2 Break-Out box

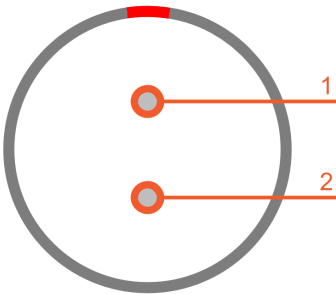
Primary connector		Lemo 1T8f
Pin	Function	
1	ETH_Tx_p	
2	ETH_Tx_n	
3	ETH_Rx_p	
4	ETH_Rx_n	
5	Power 9V 36 V DC	
6	GND	
7	Sync	
8	RTK correction input	



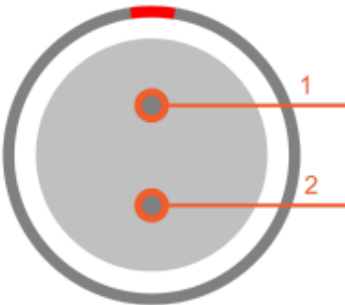
Secondary connector		Lemo 1T8m	
Pin		Function	
1		RES	
2		COM4 Tx	
3		CAN High	
4		CAN Low	
5		COM3 Rx CMOS	
6		COM3 Tx CMOS	
7		Event In	
8		GND	



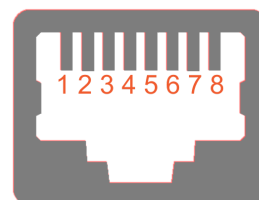
Power		Lemo 1B2m	
Pin		Function	
1		Vin +9V to +36V DC	
2		GND	



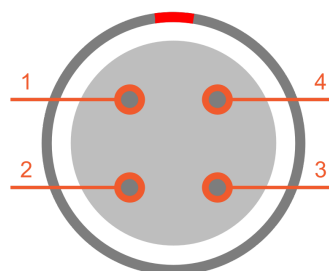
Power		Lemo 1B2m	
Pin		Function	
1		Vout = Vin	
2		GND	



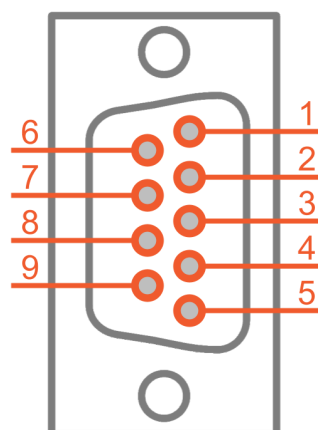
Ethernet RJ45	
Pin	Function
1	Tx_p
2	Tx_n
3	Rx_p
4	GND
5	GND
6	Rx_n
7	V+
8	V+



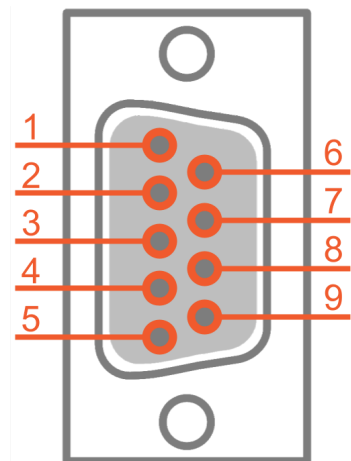
Sync Lemo 00B4f	
Pin	Function
1	
2	
3	PPS out
4	GND



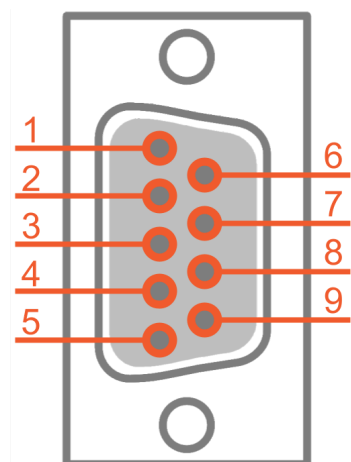
CAN D-SUB9m	
Pin	Function
1	
2	CAN low
3	
4	
5	
6	GND
7	CAN high
8	
9	



COM I/O RTK		D-SUB9f
Pin		Function
1		
2		Tx GPS
3		Rx GPS
4		PPS
5		GND
6		
7		
8		Event in
9		Power Out



COM I/O NMEA		D-SUB9f
Pin		Function
1		+5V
2		Tx NMEA
3		Rx NMEA
4		PPS
5		GND
6		
7		
8		Event in
9		

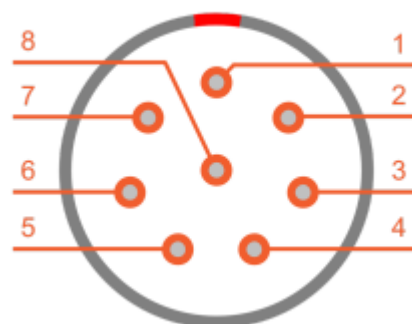


6.2. NAVION i2 Instrument

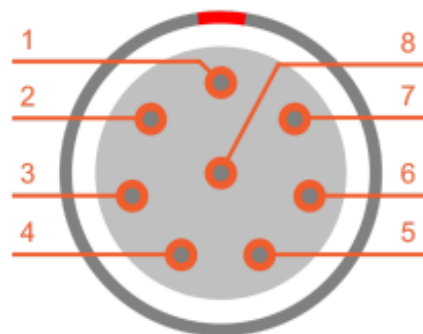


Image 20: NAVION i2 Instrument

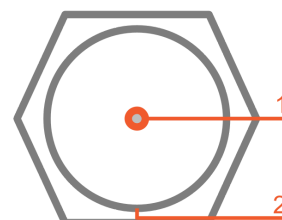
Primary connector		Lemo 1T8m
Pin	Function	
1	ETH_Tx_p	
2	ETH_Tx_n	
3	ETH_Rx_p	
4	ETH_Rx_n	
5	Power 9V 36 V DC	
6	GND	
7	Sync	
8	RTK correction input	



Secondary connector		Lemo 1T8f
Pin	Function	
1	RES	
2	COM4 Tx	
3	CAN High	
4	CAN Low	
5	COM3 Rx CMOS	
6	COM3 Tx CMOS	
7	Event In	
8	GND	



Antenna		SMA Female
Pin	Function	
1	Antenna	
2	GND	



6.2.1. LED lights meanings

LED	Description	LED OFF	LED blinking	LED ON
P	Power	No Power applied	-	Power applied
G	GNSS	No GNSS	Standalone, SBAS or RTK float solution	RTK Fixed
I	Inertial navigation	Standby awaiting heading	Aided navigation & zero motion detected	Aided navigation