FURUNO®

Electronic Navigational Instruments
FI-30 Series

LLOYD'S REGISTER QUALITY ASSURANCE ISO9001
UKAS QUALITY MANAGEMENT 001

The future today with FURUNO's electronics technology.

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TRADE MARK REGISTERED
MARCA REGISTRADA

FURUNO instruments FI-30 series...

In early 2001, Furuno launched the NavNet series of NAVigational NETwork system for a wide range of pleasure craft. With the success of this series, we are proud to introduce a new line of networking products for the powerboat and sailboat world the FI-30 series of electronic navigation instruments.

The FI-30 is a result of Furuno's extensive experience in creating new and innovative marine electronics for pleasure boats utilizing proven commercial technology and techniques.

The Furuno FI-30 instruments are designed to work under the harshest environments to ensure your safety and comfort. The FI-30 offers:

- Function and performance
- Safety and reliability
- Design superiority, individual and panel mounted
- Flexible networking configuration
- Cost effectiveness

Excellent Analog and Digital instruments

An individual FI-30 instrument performs excellent as a stand-alone unit. When multiple FI-30 instruments are networked together, you can easily display important navigational information, such as speed, compass, wind, heading, etc. all at one time.

Analog instruments display precise data with a needle-point indicator and are useful for monitoring an increasing or decreasing trend, speed, heading changes, etc.

Digital instruments display information in alphanumeric format for ease of readability. Most of the digital instruments offer more data in switchable modes. The FI-30 system allows you to select a combination of analog and digital displays that best suits your needs.

Smart and Stylish design

The compact and stylish FI-30 instruments offer flexible installation and mounting, allowing you to aesthetically configure your helm.

Digital Instruments

Easy-to-use Soft-keys

You'll learn to use the Furuno FI-30 soft-key system in no time at all.
Accurate information on the ship's heading, speed, wind and position is freely selected.

Compass Data **Speed** **Multi Control** **Wind Data**

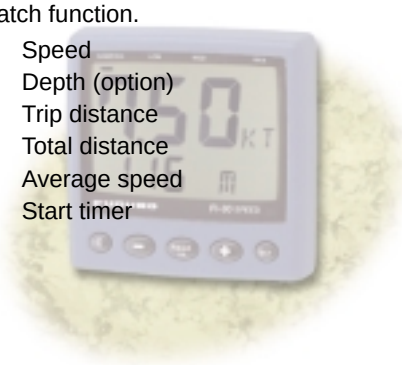
Multi Control FI-301

The Multi Control displays all the data available in the network and even functions as a remote control for the other instruments.

Speed FI-302

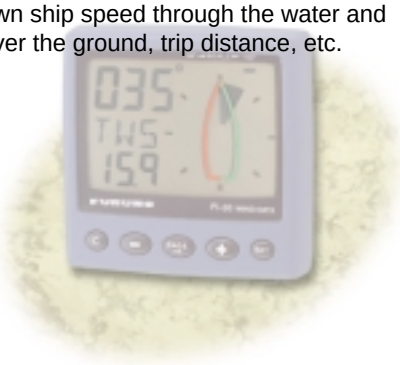
Displays ship speed, depth, trip distance, total distance, average speed and stop watch function.

- Speed
- Depth (option)
- Trip distance
- Total distance
- Average speed
- Start timer



Wind Data FI-303

Digital and graphical readouts of true and apparent wind speed and direction, own ship speed through the water and over the ground, trip distance, etc.



Compass Data FI-304

Displays the ship's heading relative to true north or magnetic north. The sensor may be a fluxgate or GPS Satellite Compass. Digital readouts with a mimic compass rose.

- Heading
- Steer memory
- External trim button
- Steer bearing to waypoint
- Course to steer
- Steer wind
- Ship speed
- Course and distance made good
- Trip distance
- Battery voltage
- Total distance
- Off-course Alarm

Multi XL FI-305

Easy to monitor all the data available in the network with large alphanumeric digits.

Note: Multi Control instrument is required to operate.

Analog Instruments

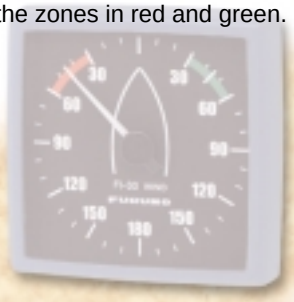
Easy-to-see in nighttime navigation

The scale and needle-point indicator are illuminated for easy viewing during nighttime navigation

Compass | Speed Trim | Steer Pilot | Wind Angle | Rudder Angle

Wind Angle FI-306

The analog wind meter displays true or apparent wind direction with the zones in red and green.

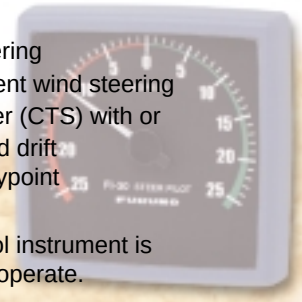


Steer Pilot FI-307

This instrument relays the data in the server to the network, enabling you to quickly set an exact course to steer towards your destination.
Settings include:

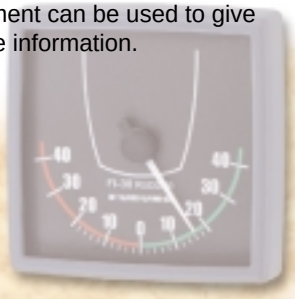
- Compass steering
- True or apparent wind steering
- Course to steer (CTS) with or without set and drift
- Bearing to waypoint

Note: Multi Control instrument is required to operate.



Rudder Angle FI-309

Together with an Autopilot (NavPilot 500), a rudder position instrument can be used to give precise information.



Speed Trim FI-308

Displays the speed differentials since last trimming. The analog indication gives an easy understanding of changing trends of measurements. According to the command from the Wind Data, the Speed Trim Display indicates the change in ship speed, SOG, true/apparent wind speed in percent.

- Change in ship speed
- Change in speed over ground
- Change in VMG (Velocity made good)
- Change of speed towards a waypoint
- Change of true wind speed
- Change of apparent wind speed
- Change of speed of current
- Change of target ship speed

Note: Wind Data instrument is required to operate.

Compass FI-310

The analog compass repeater has superb readability. A sensitive pointer on the 360-degree scale gives an accurate and stable indication of compass heading.

Server FI-3005

The server is the heart of the FI-30 instrumentation network. It is also an intelligent junction box for the transducers and sensors. Furuno NavNet equipment can also be connected through the NMEA digital interface. (NMEA is a standard on the server.)

Enclosure:	Splashproof
Power supply:	12 VDC, 27 mA

Sensors

Depth Transducer FI-3001

The depth sounding transducer is fitted under the hull. The display unit permits settings of measurement below water surface or keel.

Frequency:	200 kHz

S/T Sensor FI-3002

The paddlewheel speed sensor molded in the unique plastic housing is fitted under the hull. Retractable through hull mount for easy replacement or cleaning. Dummy plug included.

Integrated Heading Sensor PG-500

An inexpensive electromaganetic compass provides a highly accurate and stable readout of the ship's heading thanks to the sophisticated structure by three-axis magnetometer, incliometer and integral vibrating gyrosensor.

Accuracy:	± 1.5%
Sensitivity:	± 0.1°
Pitch and roll:	35°
Power supply:	12-24 VDC
Magnetic variation:	Automatic compensation (Appropriate GPS Navigator required.)
Magnetic deviation:	Automatic re-calibration

Wind Sensor FI-3003

Sensitive and stable sensor provides accurate wind speed and direction for the network. Easy, snap-in attachment for mast mounting included.

Accuracy:	Angle ± 0.5% Speed ± 0.5 m/s (kt, bf)
Power supply:	12 VDC, 20 mA
Cable:	25 m

Fluxgate Compass FI-3004

Gimbaled and liquid damped for superb stability in rough seas. Sensitivity and accuracy are proven over years of installation and through continued technical improvement. The sensor is automatically corrected for deviation in the Multi Control.

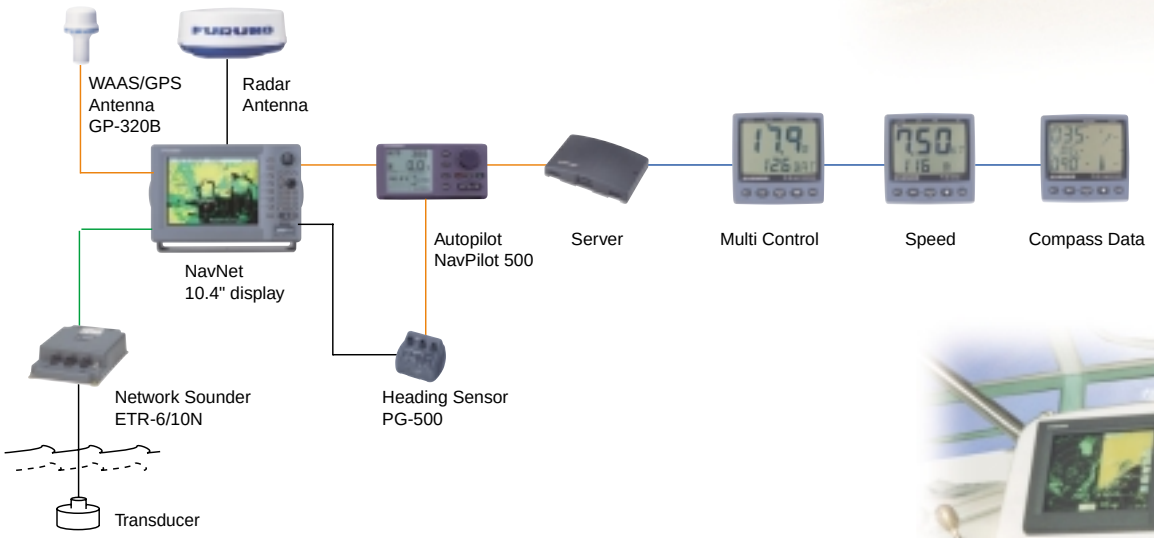
Accuracy:	± 1.5%
Sensitivity:	± 0.1°
Pitch and roll:	45°
Power supply:	12 VDC, 25 mA
Cable:	8 m

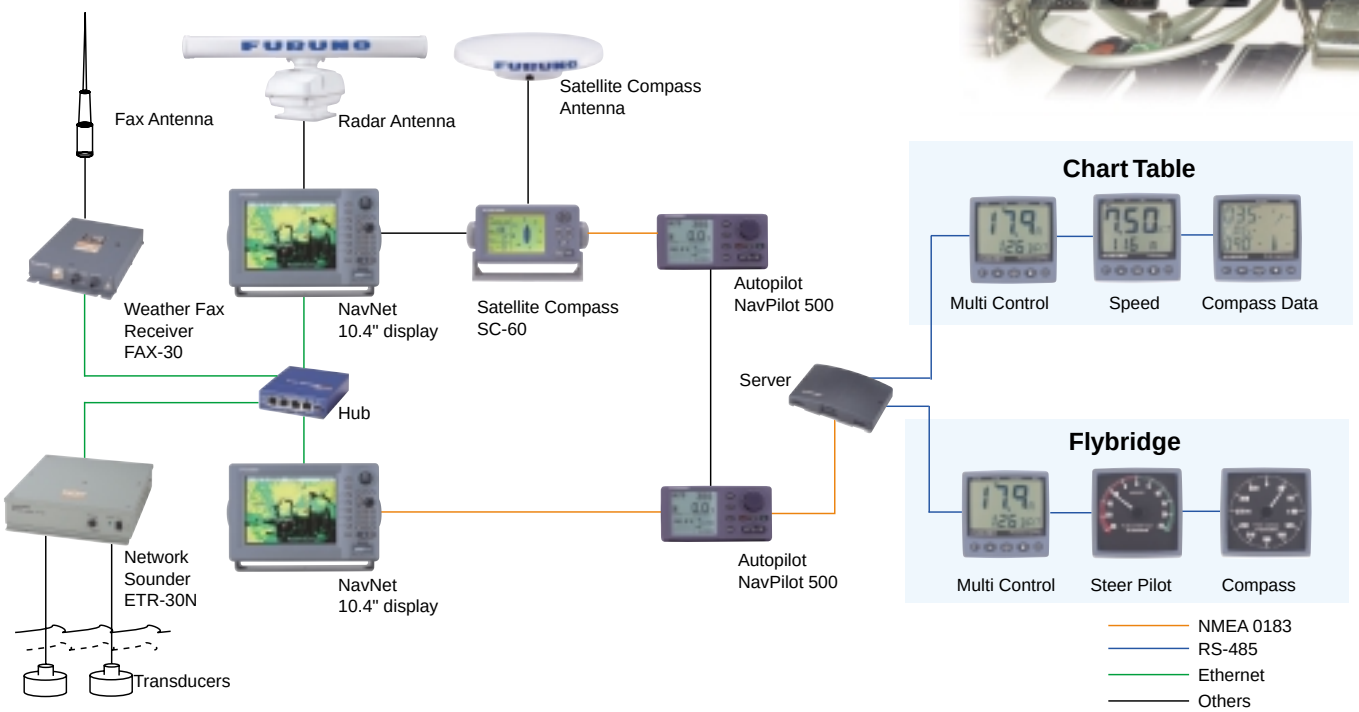
System Configurations

Nav data (incl. depth, temperature, speed through the water and heading) can be fed from external equipment via NMEA 0183.

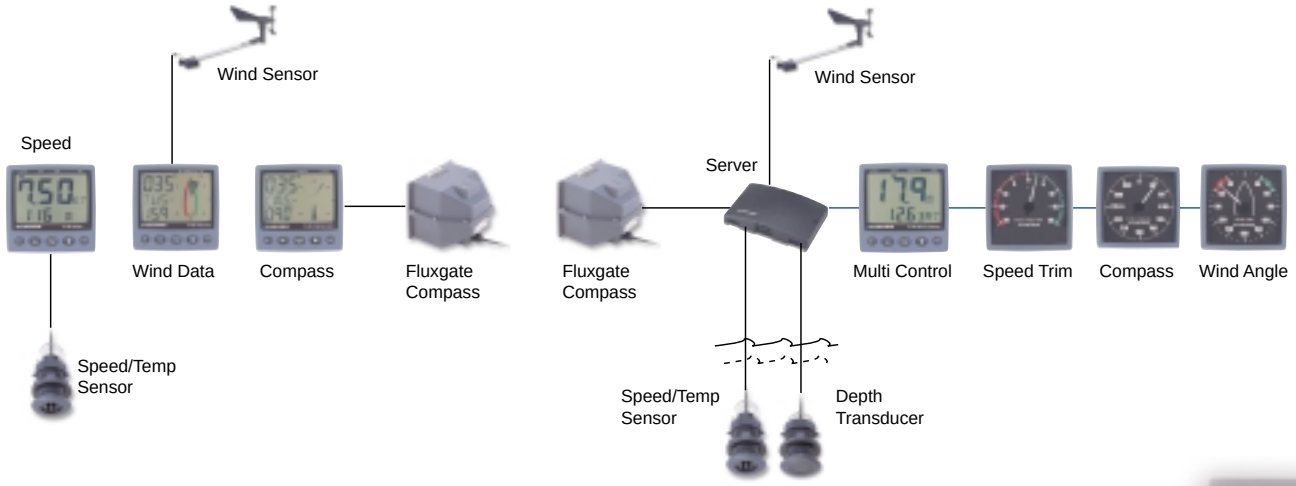
POWERBOAT

Photo from Beneteau





Basic Configurations



SAILBOAT

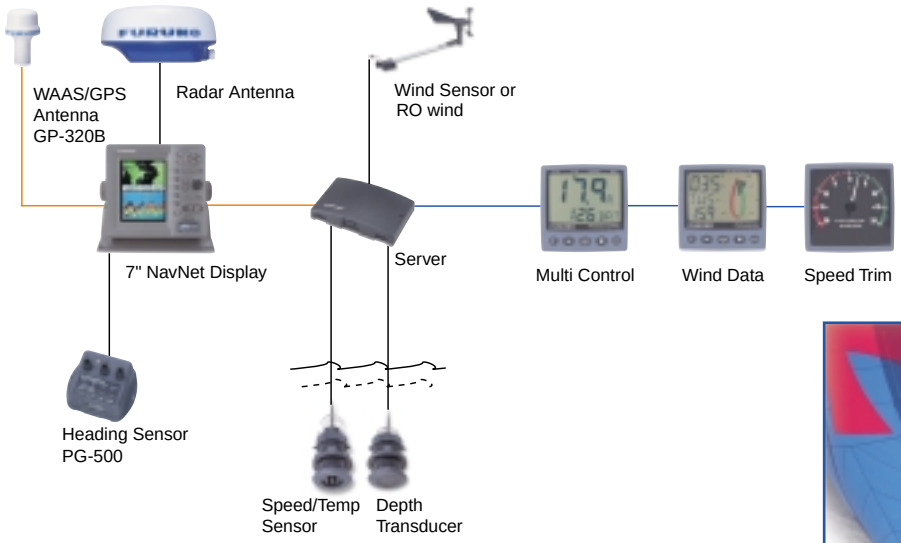
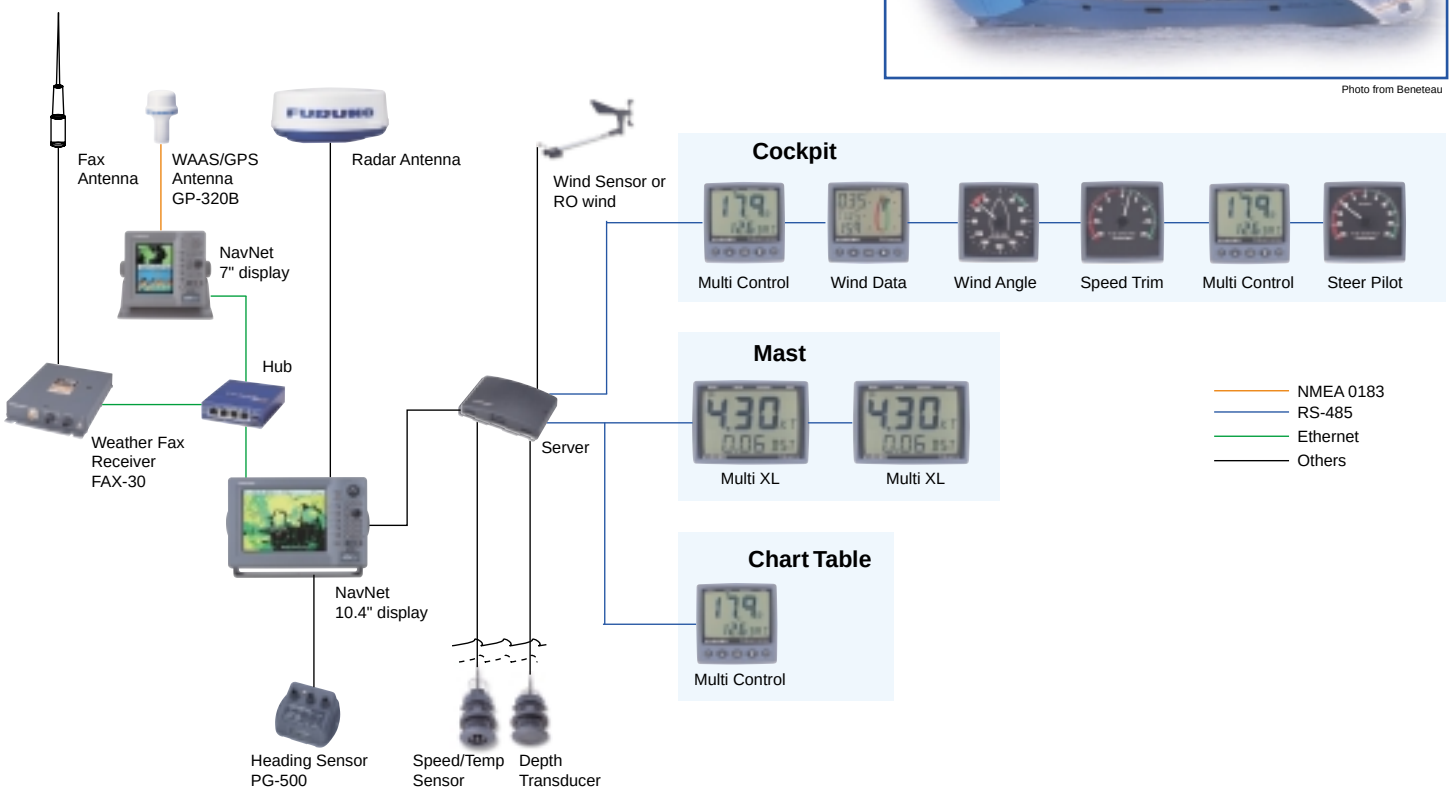


Photo from Beneteau

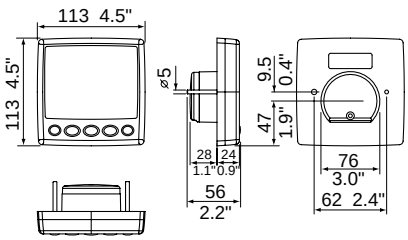


Functions of FI-30 Series

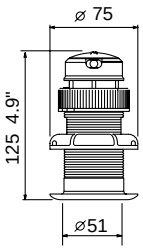
	Digital				Analog				
	Multi Control	Speed	Wind Data	Compass Data	Speed Trim	Wind Angle	Steer Pilot	Compass	Rudder
Boat Speed	X	X	X	X					
Average Boat Speed	X	X							
Maximum Boat Speed	X	X							
Trip Distance	X	X	X	X					
Distance Since Start	X	X							
Distance Made Good	X	X		X					
Water Temperature	X		X	X					
Start Timer	X	X							
Elaspsed Time	X	X							
Depth	X	X							
Deep Alarm	X								
Shallow Alarm	X								
Anchor Alarm	X								
Compass Heading	X		X	X				X	
Course Made Good	X			X					
Course Over Ground	X								
Speed Over Ground	X								
Position L/L	X								
Bearing To Waypoint	X		X						
Distance To Waypoint	X								
Cross Track Error	X		X	X					
Time To Go	X								
Estimated Time Of Arrival	X								
Battery Voltage	X		X	X					
Apparent Wind Angle	X		X	X		X			
Apparent Wind Speed	X		X						
True Wind Angle	X		X			X			
True Wind Speed	X		X						
Geographic Wind Direction	X		X						
Velocity Made Good	X		X						
Current Direction	X								
Current Speed	X								
Digital Steer Reference	X		X	X					
Analog Steer Reference			X	X			X		
Digital Trim Reference	X		X						
Analog Trim Reference			X		X				
Rudder Angle									X

Digital/Analog Instruments

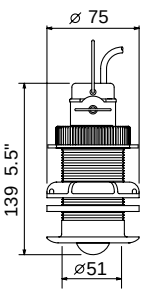
Digital Instruments: 260 g 0.57 lb
(Digital Wind: 283 g 0.62 lb)
Analog Instruments: 230 g 0.51 lb



Depth Transducer

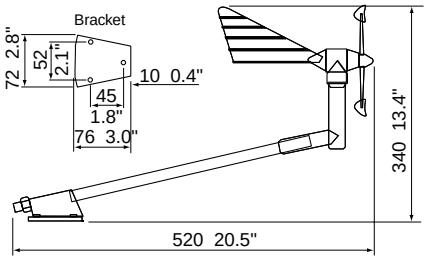


S/T Sensor

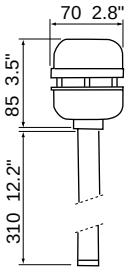


Wind Sensor

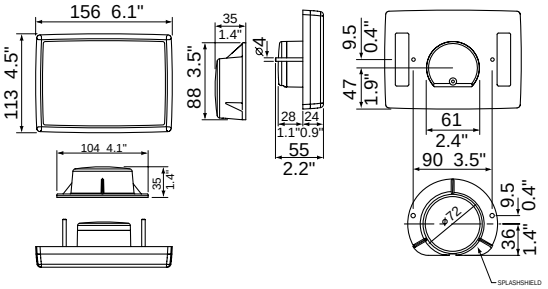
293 g 0.7 lb



Rowind Sensor

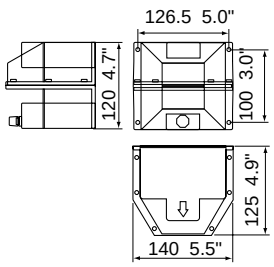


Multi XL



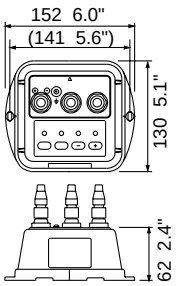
Fluxgate Compass

370 g 0.82 lb



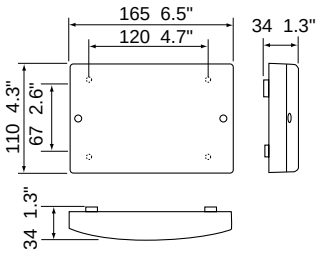
Heading Sensor

300 g 0.66 lb



Server

220 g 0.49 lb



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