## 12 EXTERNAL GPS ANTENNA

The Zipwake external GPS antenna is a 5Hz, 20-channel receiver with excellent reception that provides accurate and rapid vessel position and speed updates. Vessel speed is necessary input for the Zipwake's automatic motion controller. The antenna has a rugged construction, is fully waterproof and can be pole or surface mounted on any vessel.





## 12.1 APPLICATION

The external GPS is optional and intended to be used when no other strong GPS signal is available for the Zipwake system, e.g. when the vessel has just one helm station with a shielding top (roof) and lacks other accessible GPS sources. In this case, the external GPS antenna is a good solution. Its 5 m cable can be extended up to 15 m using Zipwake extension cables. It connects easily to the connector marked EXT GPS on the back of the control panel. The external GPS can be connected to any control panel installed in the system.

## 12.2 SPECIFICATIONS

Model	GPU
Connectors	M12 5-pin circular
Cable Material	White PVC
Cable Length	5 m (16 ft) extendable to max 15 m (49 ft)
Supply Voltage	5 V DC ±5%
<b>Power Consumption</b>	0.28 W, 55 mA (average)
Protocol	NMEA 0183 / RS232
NMEA Sentences	RMC, VTG, GGA, GSA, GSV, GLL
Baud Rate	38400
Update Rate	5 Hz
Number of Channels	20
Average Time to First Fix	Hot start 6 s, Warm start 38 s, Cold start 42 s
Operating Temperature	-30° to +85°C (-22° to +185°F)
Storage Temperature	-40° to +95°C (-40° to +203°F)
Waterproof Rating	IP67
Compliance	CE, FCC
Weight	0.065 kg (0.14 lbs) without cable and connector
Mounting	Flush or pole