

The gPIMS<sup>®</sup> Field Control Unit (FCU) samples data from Guided Ultrasonics Ltd.'s (GUL) permanently mounted gPIMS<sup>®</sup> Sensors which provide both thickness and large area monitoring data. The gPIMS<sup>®</sup> FCU collects data automatically without the need for a Wavemaker instrument nor a standard orange connection box. This unit can be retrofitted to most existing models of gPIMS<sup>®</sup> Sensors.

### TECHNICAL SPECIFICATION SUMMARY (Subject to change)

	FCU - USB Variant	FCU - 4G Variant
<b>Application Areas</b>		
Designed for	Manual Data Retrieval	Autonomous Data Upload
<b>Physical Characteristics</b>		
Dimensions W x D x H <sup>(1)</sup>	19 x 21 x 50 cm [7.25 x 8 x 19.5 inches]	
External surface	316 Stainless Steel	
Weight <sup>(2)</sup>	11.3 kg [25 lbs]	
Mounting <sup>(3)</sup>	Various options available	
<b>Power Supply Ratings</b>		
Battery type (Removable)	Nominal 12V, 7.2 Ah Lead Crystal Battery (Rechargeable)	
Typical battery life <sup>(4)</sup>	500 Collections	250 Collections
External power supply <sup>(5)</sup>	19-24 VDC (20W minimum) to recharge battery in situ	
Solar panel charging <sup>(5)</sup>	Compatible with GUL supplied 5W or 10W Panel	
<b>Output (to sensor)</b>		
Number of channels	16	
Output voltage (nominal)	± 5V (w.r.t. GND)	
Output parameters [IS equivalent (w.r.t GND)]	Analog: U <sub>o</sub> = 8.3V, I <sub>o</sub> = 503mA, P <sub>o</sub> = 1.044W, C <sub>o</sub> = 71.35µF, L <sub>o</sub> = 0.56mH Digital: U <sub>o</sub> = 5.46V, I <sub>o</sub> = 143.4 mA, P <sub>o</sub> =1.96W, C <sub>o</sub> = 987.42µF, L <sub>o</sub> = 6.9mH	
Frequency Range	10-650 kHz	
Sensor compatibility	GUL gPIMS Sensors (3" to 48")	
<b>Communication Interfaces</b>		
Cellular Modem (LTE/UMTS/GSM) <sup>(6)</sup>	-	Quectel EG21-G (FCC ID: XMR201906EG21G)
Internal Data Storage	8 GB (Archives last 2000 data collections)	
Removable Data Storage <sup>(7)</sup>	USB 'stick'	-
Configuration Interface	Wi-Fi	USB Device



- (1) Dimensions exclude the antenna, but include the removable standard mounting frame.
- (2) Weight includes removable standard pole mounting frame.
- (3) Normally supplied with a mounting bracket for vertical poles of 1" to 3" in diameter.
- (4) The exact number of collections will depend on the selected collection configuration and the strength of the 4G signal at the installed location.
- (5) The battery should be charged in a non-hazardous area. A depleted battery can be changed for a fully charged one by opening the front panel.
- (6) The 4G units are normally supplied with an active SIM Card that works in most countries.
- (7) Any capacity USB storage device can be used, but they must be formatted with a FAT32 file system, which is the industry 'default' for drives between 2 GB and 32 GB.