WAVEMAKER® G4 MINI

GULSCREENING

Technical Specifications

The Wavemaker® G4 MINI packs exceptional sampling power in a smaller and lighter package. Available in multiple configurations, the Wavemaker® G4 MINI can be tailored to match your applications.

TECHNICAL SPECIFICATION SUMMARY (*Subject to change*)

Application Areas	
Designed for	All pipe and tube applications.
Physical Characteristics	
Dimensions W x D x H *(approx.)* [1]	22 x 30 x 13 cm [8.5 x 12 x 5 inches]
Weight *(approx.)*	4.4 kg [9.7 lbs]
Screen	7" colour LCD touchscreen (800x480 pixels)
Transmitter	
Transmitter frequency range	7 to 400 kHz
Maximum output drive voltage	400 Vpp
Maximum rep-rate	20 Hz
Receiver	
Convertor sampling frequency	100 to 2500 kHz
Receiving gain range	10 to 90 dB
Analog band pass filter range (Variable)	7 to 600 kHz
Maximum sample range	400 m
Maximum number of averages	256
Channels	
Number of transducer channels	16
Diagnostics	
Dedicated Diagnostic Interface	Built-in diagnostic connection to verify instrument and cable performance.
Communication Interfaces	
USB Link	USB 2.0
LAN	10/100 Base-T Ethernet (using supplied cable).
Software	
Controlling Software	Wavemaker® WavePro4™
Supported Operating Systems	Windows 7 to Windows 11
Processing Options	
Unrolled Pipe (EFC) [2]	Total Full Matrix Focusing with C-Scan type display. (Requires EFC option).
Absolute Calibration [3]	Automatic DAC Calibration. (Requires CAL option).

(1) Dimensions without removable handles.
(2) GUL patented: Method and apparatus for inspecting pipes (US8356518B2, GB2437547B, WO2007125308A2).
(3) GUL patented method: Processing signals acquired during guided wave testing (US9927405B2, EP2598866B1, WO2012013942A1).

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Power Ratings [4]	
Battery type (Removable)	6.6 Ah, 14.8 V Li-ion
Typical battery life	At least 150 standard tests.
External power supply to charge instrument	18-20 VDC (60W min)
Other Features	
Transducer Ring Identification	Detects transducer ring type, size and serial number.
Transducer Ring Capacitance	Measures transducer capacitance (0.1ηF precision).
Transducer Ring Pressure	Able to read pressure sensors in HD / HT rings.
Operator Identification	Reads and updates operator 'iButton' ID keys.
GPS	20 channel SiRF Star IV GPS module.

RING COMPATIBILITY AND CONFIGURATIONS

Ring	
Standard Solid (R2F) and Inflatable (R2B) Rings	Yes
Compact™ Rings (R3D)	Yes (w/FW update)
Claw Small Diameter Rings (R2G)	Yes
HD Solid (R2F-HD) and HD Modules (R2MHD) in inflatable rings	Yes
HT Solid (R2F-H) and Inflatable (HT-R2B) Rings	Yes
gPIMS® Sensors (R2P)	Yes
Lowest frequency setting in Variable Modules	Yes
Special Module Types	
Longitudinal Mode (with 4 rows)	Yes
Special Configurations	
Joining Two Rings	Requires convertors
Joining Three or Four Rings	No
Pitch-Catch collections	Requires convertors

WAVEMAKER G4 MINI OPTIONS

Models	
WM-G4M-FULL	A fully loaded G4mini (configured to support all of the packages listed below). Supplied with a pair of 2.5m transducer cables, a battery, USB umbilical, and charger.
WM-G4M-BASE	A base level G4mini suitable for collection of data on bare (or painted) pipe using only standard rings. Extra packages (listed below) can be added to extend the base system.
Packages	*These can be added to the G4M-BASE to extend functionality. They are all included in the G4M-FULL.*
WE-G4MPKG-BURIED	400Vpp output, lower frequency collection, Pitch-catch configurations (4 rows).
WE-G4MPKG -PLANT	400Vpp output, higher frequency collection, support for HD, HT, R2G (claws) rings.
WE-G4MPKG -GPIMS	Supports all required collections for gPIMS® sensor (including interface for ATEX rings & untrained
WE-G4MPKG -BIGPIPE	Supports joining rings together for large pipes.
WE-G4MPKG -SPEED	Increase the maximum possible rep-rate and sample length.
WE-G4MPKG -L02	Supports required functionality for using the longitudinal mode.
WE-G4MPKG -UPGRADES	Access to new versions of WavePro4™ as they are released.
Software Options	
WM-EFC	Allows for the unrolled pipe (C-Scan) display for data collected from an instrument.
WM-CAL	Allows for the absolute calibration of reflection amplitudes from an instrument.

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[4] For information on safety ratings and compliance, please download latest DoC from the GUL website.

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