

QMB6 Dual Thickness Monitor with integrated oscillator



The QMB6 quartz measurement box combines simplicity of operation with unrivalled accuracy in a compact form factor, delivering precise measurements at up to 0.01Hz frequency resolution for 2 sensor channels.

Quartz sensors can be either directly connected utilizing the integrated low noise oscillator or linked via external oscillators when the QMB6 is installed at larger distance from the sensor.

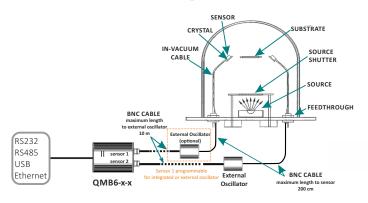
The QMB6 is available with 4 hardware communication standards RS232/485, USB and LAN/Ethernet with PoE option. The latter simplifies installation in an ethernet infrastructure network.

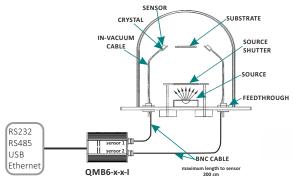
Monitoring and data logging can be performed by either using the supplied Windows software or by integration into a host environment utilizing the industry standard ModBUS protocol.

Features

- 2 independent measurement channels
- High frequency resolution of up to 0.01 Hz
- ModBUS protocol for ease of integration
- 4 communication interface options: RS232/RS485, USB or Ethernet (PoE)
- Includes low noise integrated oscillator
- Unmatched low-cost compact unit performance
- All connecting cables, power supply and Windows Software included

Connection examples

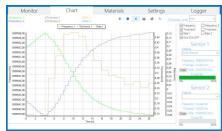




SPECIFICATIONS	
Frequency Resolution	0.1 Hz at 10 readings/sec (standard resolution) 0.01 Hz at 10 readings/sec (high resolution version)
Sampling frequency	0.5 to 10 Hz
Quartz oscillator type	6 MHz
Reference frequency stability	0.5 ppm
Sensor input	2 x BNC female
Interface (chosen at time of order)	RS232, RS485, USB, Ethernet (PoE)
Protocol	ModBUS
Supply voltage	1224 V DC for RS232/RS485 5 V DC for USB 48 V DC for LAN/Ethernet, PoE IEEE 802.3af
Supply current	max 500 mA for both channels
Operation temperature	15 °C to 40 °C
Dimensions	106.5 mm x 61.3 mm x 26 mm (RS232/RS485 Version) 96.4 mm x 61.3 mm x 26 mm (USB Version) 116.4 mm x 61.3 mm x 26 mm (Ethernet Version)
Weight	~0.2 kg
Windows Software (included)	Provides datalogging functions for up to 253 units, Ethernet option extends number of units to unlimited; all service operations, including IP address setting, factory parameter restors and firmuracy unrade.

Monitor Monitor	Chart	Materials	Settings	Logger
Sensor 1 Material: Au - Gold			Sensor 2 Material: Ag - Silver	
Thickness:	5999564.2 0.0005 nm 0.000159 n		Thickness:	5998325.13 Hz 0.0325 nm 0.000585 nm/s
Choose uni	t nm · Clea	r	Choose Unit	nm Clear
Cry	stal life	_	Crys	tal life
0%		100%	0%	1025

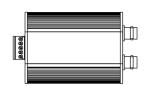
QMB6 Software Sensor Monitor



QMB6 Software Chart







QMB6 external dimensions (RS232 Version)

ORDERING INFORMATION

QMB6 Dual Thickness Monitor	BT-QMB6- □ - □ - □
Resolution	* * *
Standard resolution	S
High resolution	H
Interface	
RS232	2
RS485	4
USB	U
Ethernet (PoE)	E L
Oscillator support	
1x integrated/ext.+ 1x ext.	
2x integrated oscillators	

BT-QM-EO	Passive external oscillator incl. 10 cm BNC cable
BT-QM-MBS	Mounting Bracket Set for QMB6
BT-QM-EO-MBS	Mounting Bracket Set for External Oscillator

Scope of Supply:

- QMB6 unit
- Power supply / interfacing cables depending on version
 - -2: 12 V DC supply + RS232 cable 3m
 - -4: 12 V DC supply
 - -U: USB A to USB B cable 3m
 - -E: Power injector supply + RJ45 cable 3m
- 1x 10cm BNC cable
- 1x 6 MHz Test Quartz



External Oscillator QMB6-EO



QMB6-EO-MBS Mounting Brackets



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