

## QM20 Quartz Monitor

dual channel Quartz Crystal Oscillator



### QM20 Quartz Monitor Dual channel Quartz Crystal Oscillator

The QM20 combines simplicity of operation with unrivalled accuracy in a compact form factor, delivering precise measurements at one of two available unit resolutions: 0.1 or 0.01Hz resolution. In addition, this unique instrument boasts two independent measurement channels and also features ModBus protocol for implementation in both laboratory and industrial applications alike. External oscillator option extends functionality in distributed systems where cable lengths brings some limitations.

The QM20 is available with 4 hardware communication standards RS232/485, USB and LAN/Ethernet with PoE option. The last one simplifies deployment where no power cable is needed.

## Perfect performance

The QM20 represents one of the highest accuracy and most cost effective solutions on the market when taking into account the independent dual measurement channels and 0.01Hz resolution figure. The high resolution enables a deposition layer thickness measurement which is accurate to just 0.012 Å (density = 1).

There is no other low-cost compact unit on the market to match it!

## Software

The QM20 includes QM20 soft Windows platform software which is capable of simple operations and data logging for up to 253 units with RS485 interface. LAN/Ethernet option extends numbering of units to unlimited.

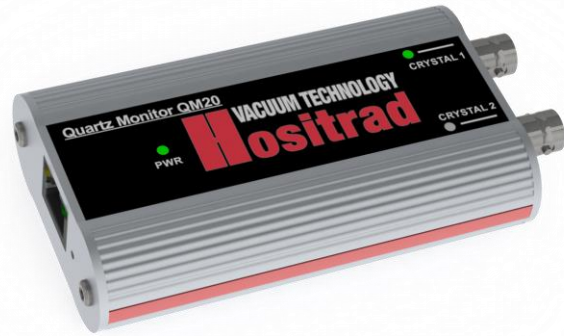
All service operations can be performed via the QMS20 soft interface, including IP address setting, factory parameter restore and firmware upgrade. QM20 soft also regularly and automatically checks for available upgrades, ensuring the end user always has the latest available firmware.

## Easy installation

The QM20 is delivered as a complete package with 3m long communication cable and external power supply as standard. Other combinations are possible on request.

Simple LED indicators immediately show the connected crystal status.

A wide range power supply voltage and low power consumption make the device environmentally friendly and expand the possibilities for powering- especially useful in industrial applications.



## Technical specifications

- Frequency Resolution: 0.1Hz or 0.01 Hz at 10 readings/s (model dependant)
- Number of single measurements per second: 0.5 to 10
- Quartz oscillator type: 6 MHz
- Reference frequency stability: 0.5 ppm
- Sensor inputs: 2
- Input type: BNC
- Interface: RS232, RS485 USB or LAN/Ethernet PoE (Only one interface can be used at a time and is chosen at time of order)
- Protocol: ModBUS
- Supply voltage: 12-24V DC for RS232/485; 48V DC for LAN/Ethernet PoE
- Supply current: max 500mA for both channels
- Supply & Interface connector: removable, screw terminal block, 3.81mm spacing
- Operating Temperature: 15°C to 40°C

## Dimensions

- 105mm x 61mm x 26mm (RS232/485 and USB version)
- Net weight: 0.2kg
- 125mm x 61mm x 26mm (LAN/Ethernet version)
- Net weight: 0.3kg

