



RUBIDIUM OSCILLATORS

For ultimate timekeeping precision, reliability and stability

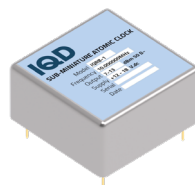
Rubidium oscillators are a type of atomic clock and are the most accurate time standards known that can be mounted on a PCB. They serve as independent frequency standards for laboratories and high-precision scientific research test apparatus, as well as a backup for telecommunications broadcast technology, and global positioning systems (GPS) in the event of primary sync source failures.

Short-term stability is provided by an OCXO locked into the atomic reference in the package. The addition of rubidium gas, stimulated by microwave RF at a particular frequency, provides further long-term frequency stability qualities.



Contact our experts

Call our technical support team for advice on the right part for your design



	ICPT-1	IQRB-1	IQRB-4	IQRB-2	IQRB-3
Key Features	Low power, CPT Technology, 1pps input/output 1µs/24hrs holdover	Small Package	Small package 5 V supply voltage	Low phase noise	Low phase noise 1pps input/output 1µs/24hrs holdover
Package Size (mm)	45.0 x 36.0 x 14.5	50.8 x 50.8 x 25.0	50.8 x 50.8 x 25.0	101.2 x 60.7 x 37.7	101.2 x 60.7 x 37.7
Output Compatibility	HCMOS	Sine	CMOS	Sine	Sine
Frequency	10 MHz	10 MHz	10 MHz	10 MHz	10 MHz
Ageing	±0.3 ppb/month	±0.5 ppb/month	±0.5 ppb/month	±0.5 ppb/month	±0.5 ppb/month
Phase Noise (@1kHz)	-140 dBc/Hz	-140 dBc/Hz	-140 dBc/Hz	-155 dBc/Hz	-155 dBc/Hz
Supply Voltage	3.3 V	12 V - 18 V	5 V	12 V - 15 V	12 V - 15 V
Frequency Control	1 pps input Digital frequency control	Analogue voltage control	Analogue voltage control	Analogue voltage control	1 pps input

IQD Technical Support Services

We have a dedicated engineering and application test facility in the UK exclusively to support our customers, including:

- Crystal parameters including FR, FL, CO, C1, Trim, R1
- Oscillator parameters including F, current draw, output characteristics
- Frequency behaviours over temperature (stability)
- Phase noise and phase jitter
- Short-term stability
- Accelerated ageing
- Circuit characterisation
- MTIE/TDEV testing



About IQD

IQD offers one of the most comprehensive frequency product ranges available; from low cost commercial grade timing devices to those used in high reliability industrial and extended temperature applications including: Quartz Crystals, Clock Oscillators, Crystals & Oscillators qualified to AEC-Q200, VCXOs, TCXOs, VCTCXOs, OCXOs, GPS Disciplined OCXOs, and Rubidium Oscillators.

IQD has been a recognised market leader in the frequency products market since 1973. The company has invested in its design and technical measurement capabilities at its head office in the UK, which also acts as the centre of excellence for frequency products within the Würth Elektronik eiSos Group. This service, combined with excellent product quality and reliability, makes IQD the best choice for your frequency product and timing requirements.

IQD

Head Office UK: +44 (0) 1460 270200

Germany: +49 (0) 7942 945 4912

info@IQDfrequencyproducts.com

IQDfrequencyproducts.com

in /iqd-frequency-products-ltd

✕ @iqdfrequency



IQD Frequency Products Ltd, Station Road, Crewkerne, Somerset TA18 8AR, UK