

## Rubidium Oscillator

### IQRB-3



### Key Features

- Low phase noise
- 1 PPS input/output

## IQRB-3 Rubidium Oscillator

The IQRB-3 is a low phase noise 12 V rubidium oscillator with 1 PPS input/output. Housed in a 101.2 x 60.7 x 37.7 mm package the IQRB-3 can be synchronised to a 1 PPS signal as well as used as a 1 PPS source. Additionally, it offers superb phase noise performance with a close in phase noise typically at -110 dBc/Hz @ 1 Hz and a noise floor as low as -158 dBc/Hz.

### Specification

- 101.2 x 60.7 x 37.7 mm
- 10 MHz output
- ±0.3 ppb (typ) stability over -20 to 60 °C
- Typical short term stability of 8E-12 @ Tau = 100 s
- 1 PPS input and output
- 12 V supply voltage
- Sine output

### Applications:

Frequency and timing reference for:

- Broadcasting
- Communication
- Financial data distribution
- Global Navigation Systems (GPS)
- Industrial equipment

### Parts available:

| Part Number  | Supply Voltage | Package (mm)        | Output Compatibility | Frequency | Short Term Stability @ 1 s | Operating Temperature Range |
|--------------|----------------|---------------------|----------------------|-----------|----------------------------|-----------------------------|
| LFRBX0084479 | 12V            | 101.2 x 60.7 x 37.7 | Sine                 | 10 MHz    | 5E-11 @ Tau                | -20 to 60 °C                |

### Additional material available:

#### Handbook

IQD has done extensive testing and gathered the results into a comprehensive handbook. These include among others short-term stability, power consumption, phase noise and frequency over temperature measurements. Please contact [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com) for further information.

