

# **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  $-110 \, \text{dBc/Hz}$  @ 1 Hz and a noise floor as low as  $-158 \, \text{dBc/Hz}$ .

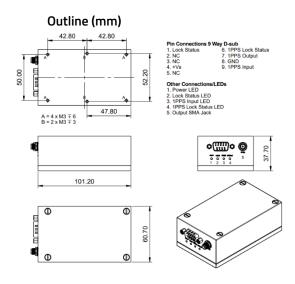
## Specification

- 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<br>Voltage | Package (mm)        | Output<br>Compatibility | Frequency | Short Term<br>Stability @ 1 s | Operating<br>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 <a href="mailto:info@iqdfrequencyproducts.com">info@iqdfrequencyproducts.com</a> for further information.