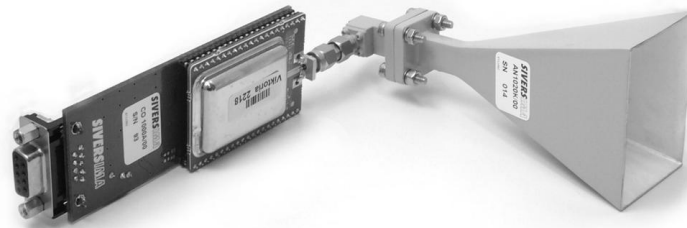


## General



The RS3400K/00 24 GHz FMCW transceiver is available in an evaluation kit. This includes a CO1000A controller board, 20 dB standard gain horn antenna and a male to male SMA adapter. The user will need to provide a 12 V DC power supply and RS232 serial/USB cable to complete the evaluation setup. A USB stick with instructions and software for communicating with the controller board is also included. At least a basic knowledge of FMCW radar principles and signal processing including FFTs is recommended.

- Assembled dimensions – approximately 160 x 140 x 60 mm
- Assembled mass – approximately 270 grams

## Applications

- Level gauging
- Object detection
- Altimeters
- Other ISM band systems

## Features

- RS3400K/00 FMCW transceiver module
- CO1000A/00 controller board
- AN1020K/00 standard gain horn antenna (20 dB)
- Male to male SMA connector
- USB flash memory drive containing manual and software

### FMCW transceiver

- 24.75 GHz center frequency
- 1.5 GHz bandwidth
- 900 mW power consumption
- Intrinsically safe design
- -12 to -6 dBV peak-peak IF output
- Three wire serial synthesizer control

### Controller board

- 12 V DC power input
- 9 pin DSUB serial connector
- Onboard MCU and ADC
- Control via terminal software

### Antenna

- 20 dB standard gain horn
- Waveguide to SMA adapter included
- Precision copper construction
- 22.0 GHz to 33.0 GHz bandwidth
- H-plane beamwidth @ 24 GHz – 18.6°
- E-plane beamwidth @ 24 GHz – 16.1°

