OEM IP and Data transmitter / receiver system

Rogue Waves Data Over RF OEM board is a flexible multi use radio module that can be configured for sending and receiving Ethernet, RS/232 RS/485, TTL UART and GPIO data signals.

The OEM module is supplied without housing in a PCB format allowing customers to integrate into their own designs. Control of the device is via the RW Web GUI for configuration. The OEM A2 version operates in the 2.2–2.5GHz band.

- Small footprint
- Serial RS232/485
- TCP Client or Server
- UDP
- Uni or bidirectional (half duplex) options

Rogue Waves specialises in video and data wireless systems. Our product line is developed from years of experience in film and broadcast which grants us an insight into the real world problems.

Configurations & Part Numbers

RW-DATA-OEM-A2
OEM board

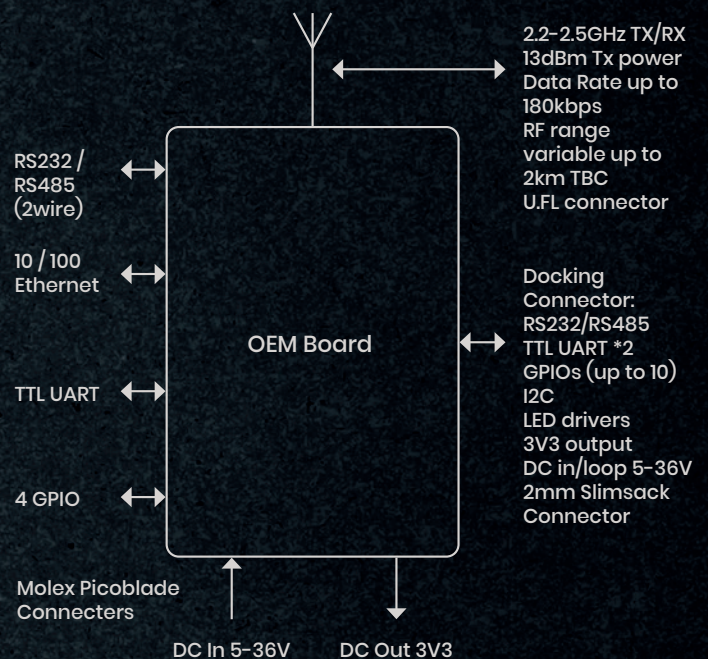**RW-DATA-OEM-SETUP**
Setup fee for pre configuration

The board is configured via web browser by the customer, as standard all options are available to the customer in the GUI. If you wish to restrict the options, for instance only allow frequency changes and restrict access to input configurations so the end user can not change them, please contact us to discuss.

Specifications

Software configuration examples:

General	
Input Voltage	+5 – +36 VDC +3.3 VDC option
Antenna Connection	Hirose U.FL
Size	37 x 30 x 9mm (max)
Mounting holes	3 x 2.2mm holes (m2 screws)

Radio Interface	
Frequency	2200 to 2500 MHz
Channel Width	200, 400, 800, 1600 kHz
Modulation	LoRa
RF Power	17.5mW (+12.5dBm) Max
Raw Data Rate	595 bps / 253910 bps
Sensitivity	–130dBm (@595bps) –99dBm (@253.9kbps)
Max Data throughput	181kbps

Serial Interface 1	
Protocol	RS232, RS485 (Half Duplex) switchable
Baud Rate	250kBaud (RS232), 1MBaud (RS485)
Connector	Molex Picoblade 53047-0310

Serial Interface 2	
Protocol	3v3 UART
Baud Rate	1MBaud
Connector	Molex Picoblade 53047-0410

Ethernet	
Speed	10/100M Auto MDIX
Connection indicator	LED via Picoblade 53047-0210

GPIO interface	
Number of IO	4
Type	Configurable input/output 3v3
In line resistors	Board mounted optional value
Ohm default	470
Connector	Molex Picoblade 53047-0610

*All information is subject to change

RS232 / RS485 (2wire)

10 / 100 Ethernet

TTL UART

4 GPIO

OEM Board

Molex Picoblade Connecters

DC In 5-36V

DC Out 3V3

2.2-2.5GHz TX/RX
13dBm Tx power
Data Rate up to 180kbps
RF range variable up to 2km TBC
U.FL connector

Docking Connector:
RS232/RS485
TTL UART *2
GPIOs (up to 10)
I2C
LED drivers
3V3 output
DC in/loop 5-36V
2mm Slimsack Connector

Overview

Uni or Bi Directional

2.2 to 2.5GHz Range'

rogue waves

Contact us
020 8242 6043 ✉ info@rogue-waves.com

Rogue Waves Ltd
PO Box 13104
Sudbury, CO10 3EP