

RFCN-302

Long range datalinkSDR radio 2*1w





- RadioForce series radios, based on SDR architecture, can be loaded with different waveforms to meet the diverse needs from different users.
- RadioForce series support mesh mode, point-to-point and point-to-multipoint modes. IAS(Interference avoidance scheme) is supported .
- RFCN-302 is a compact datalink module which have military grade protection handheld radio, Rich interfaces are provided with this module. It is ideal for Man-Unmanned teaming.

Waveform	cofdm
Working mode	Ad hoc network, point-to-point, point-to-multipoint
TX power	30dBm * 2 channels
Frequency	1300MHz-1500MHz
RX sensitivity	-108dBm@bandwidth=1.25MHz
Bandwidth	From 1.25MHz to 10MHz
Data Throughput	Max 10MHz: up to 30Mbps (Diversity) up to 60Mbps (MIMO) (License dependant)
Network capacity	up to 64 nodes in a single network
Anti-interference	interference avoidance scheme (optioned)
LPD/LPI	Supports silent mode

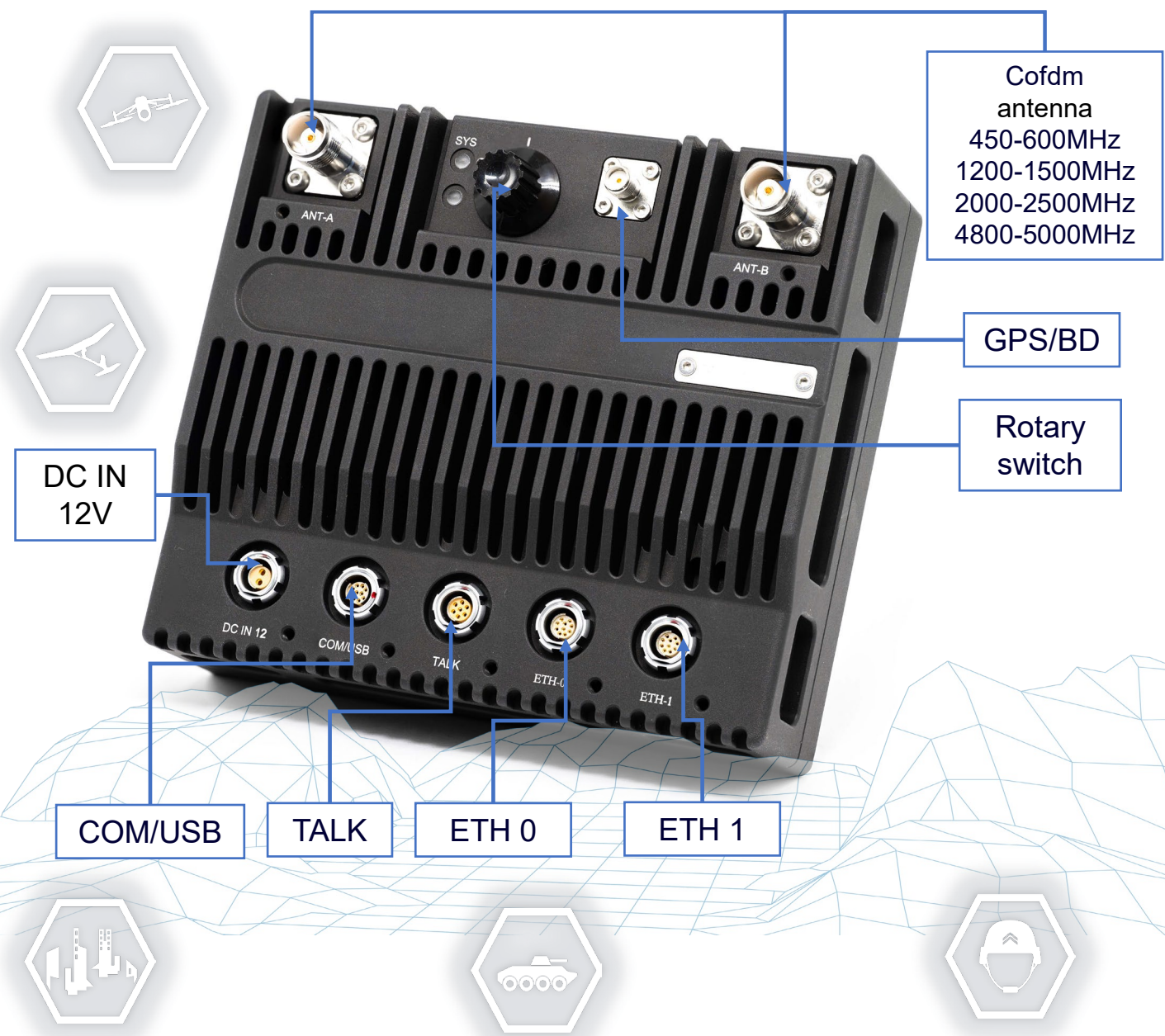


Interface	ETH,GPS
Power consumption	typical 8w
Distance	LOS≥30km NLOS≥1km

RFCN-302

Long range datalinkSDR radio 2*1w

RADIOFORCE



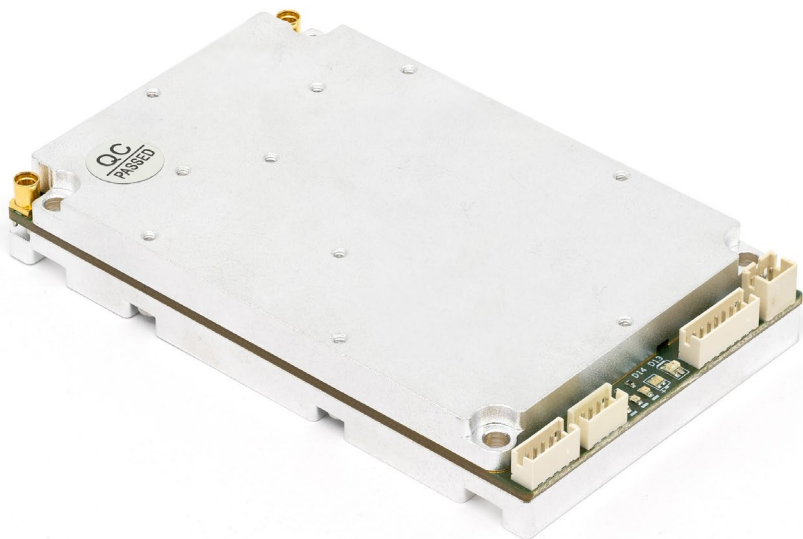
Power supply		Physical		Interface	
Adapter	12V/60w	Dimension (mm)	140*123*40	RF	TNC*2
consumption	Typical 8w	weight (g)	902	eth	RJ45, fischer 10pin
				DC IN	fischer 2pin

	Name	Quantity	P/N	Descriton	remark
1	Radio	1	RFCN-302	Radio itself	
2	Spring antenna	2	LPA-****TNC-2.5-S	2.5dB	
3	GPS antenna	1	LPA-****SMA-GPS	GPS,BD,GNSS	
4	Eth cable	2	LPCA-ETH-RJ45	Circular connector-RJ45 socket	
5	Power adapter	1	LPCA-PWR-60w	24V, 2.5A	

RFOB272-2000-2500

2*27dBm mesh OEM board

RADIOFORCE



Specifications		
Frequency Range		2000Mhz to 2500Mhz
RF Bandwidth(MHz)		1.25/2.5 / 5.0 / 10.0
Data Bit Rate	Audio	4.8kbps
	Eth Data throughput	Peak rate up to 28Mbps (Diversity) Peak rate up to 63Mbps (MIMO)
RF Output		Max 27dBm/channel
Receiver Sensitivity		≤ -100dBm (5Mhz Bandwidth)
Power Input		8.0 to 14.5Vdc
Power Consumption		5W (Standby)
		16W (Max)
Interface		
RF Interface		2× MMCX (2 × ANT)
Control and Data Interface		1 x Ethernet; 1 x RS232; 1 x LED
Physical Specification		
Dimension (L × W × H)		90mm × 55mm × 14mm
Working Temperature		-40°C ~ +65°C
Weight		93g

This section covers the pinouts of the relevant ports:

J1 DC IN (PH2.0 2P)	
Pin	Function
1	DC_IN
2	GND

Pin	Function
J5 (ANT1)	MMCX
J6 (ANT2)	MMCX

J9 UART0 RS232 (ZH1.5 4P)	
Pin	Function
1	GND
2	UART2_RX
3	UART2_TX
4	3.3V

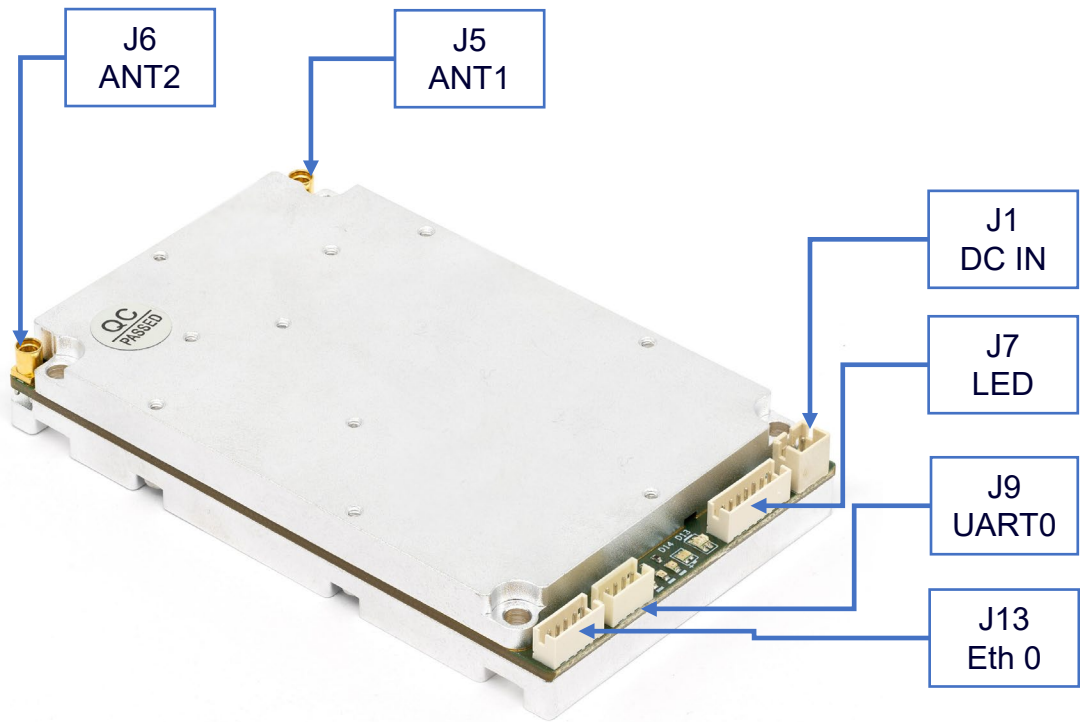
J7 LED Status Indication (ZH1.5 7P)	
Pin	Function
1	GND
2	LED1G
3	LED1R
4	LED2B
5	LED2G
6	LED2R
7	3v3

Note: LED1 is for Connection Status (Dual)
LED2 is for Signal Quality Status (Triple)

J13 ETH0 (ZH1.5 5P)	
Pin	Function
1	GND
2	RX+
3	RX-
4	TX+
5	TX-

RFOB272-2000-2500
2*27dBm mesh OEM board

RADIOFORCE



Dimension:

