Cognyte S2 FalcoNet Series 2 Module User Guide

Contents

Cognyte

Cognyte S2 FalcoNet Series 2 Module

FalcoNet Series 2 Module

User Guide
Revision 1.3, December 2022

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Introduction
This document is designed to provide the user with hardware information on the FalcoNet Series 2 box solution.

Series 2 Module Overview

Feature	Value	
Power Output @5G TDD	260w (35w)	
Receiver Sensitivity	DC power In	
Average Power Consumption: Full power transmissi on (Idle mode)	Environmental Operational Temperature range	
Storage Temperatures	Dimensions	
Weight	Supported 5G bands	
Band Band n78 (5G TDD 3500)	Band n77 (5G TDD 3700)	
Frequency	3450-3550 MHz	3700-3980 M Hz

Hardware Configuration
Interfaces

- Lan
- ON/OFF Switch
- Lan Lan
- RF IN
- Power In
- SYNC
- TRIG

- GPS
- CLOCK
- CLOCK

Solutions
Antenna Options

- + Antenna Cable LMR240-3m or Spuma400-6m depending on customer needs
- + Directional antenna
- Cables + 3 meters LMR240 + 6 meters SPUMA 400 only

RF Exposure Information
In the table below, Power and Gain are entered in units of dBm and dBi respectively and conversions to linear forms are used for the calculations.

Notes:

1. The manufacturer configures output power so that the maximum power after accounting for manufacturing tolerances, will never exceed the maximum power level measured
2. The output power in the table above is the maximum power per chain among various channels and various modes within the specific band
3. The antenna gain in the table above is the maximum antenna gain among various channels within the specified band

Intellectual Property.

Introduction

This document is designed to provide the user with hardware information on the FalcoNet Series 2 box solution.

Series 2 Module Overview

Feature	Specifications
Power Output @5G TDD	17dBm (3450MHz – 3550MHz) 28dBm (3700MHz – 3980MHz)
Receiver Sensitivity	@5G TDD >-95dBm
DC power In	24v to 36v
Average Power Consumption: Full power transmission (Idle mode)	260w (35w)
Environmental	
Operational Temperature range	0^{o} to $45^{o}C$
Storage Temperatures	-20^{o} to $65^{o}C$
Dimensions	563mm x 200mm x 86mm (2U half 19” drawer)
Weight	8kg (Box Only)

Supported 5G bands

Band	Frequency
Band n78 (5G TDD 3500)	3450-3550 MHz
Band n77 (5G TDD 3700)	3700-3980 MHz

Hardware Configuration

Interfaces

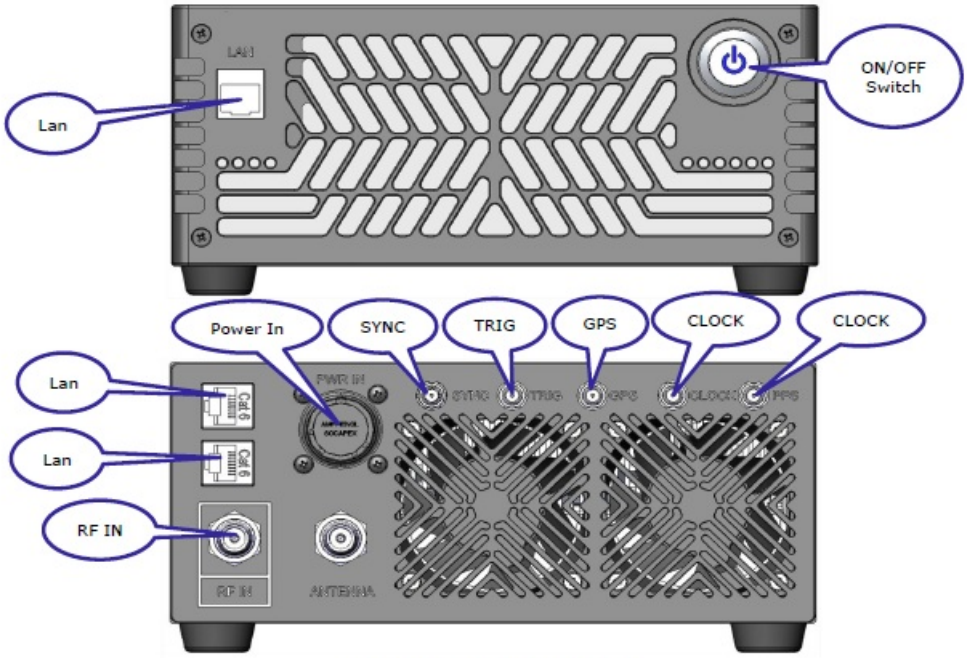


Figure 1 5G Box Front and rear panel

Front Panel:

1. LAN- RJ45 panel mount adaptor
2. On/Off Switch

Rear Panel:

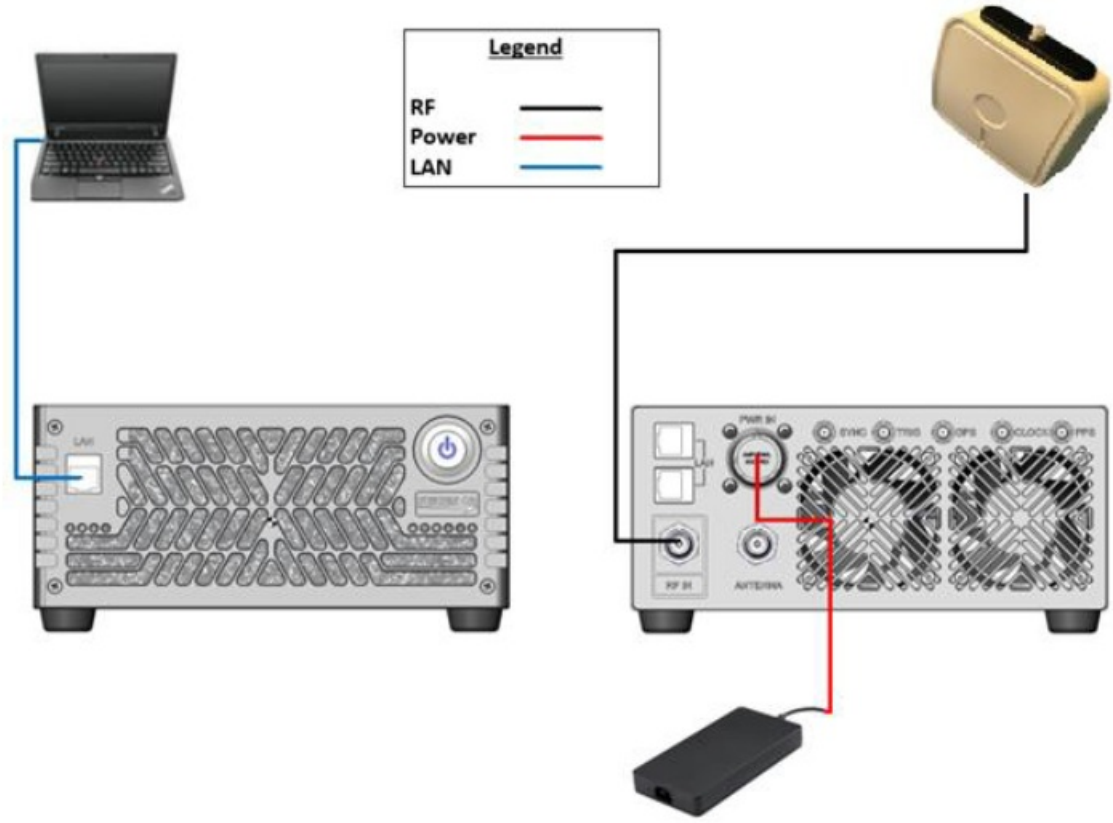
3. LAN- 2x RJ45 panel mount adaptors
4. Power IN – 4 way Amphenol Power In connector
5. RF IN – QN-type connector RF in from external Gi2s or Series01 systems
6. Antenna – QN-Type connector RF out to 5G support Antenna
7. Sync – SMA Panel Connector for dual box Sync (connect two or three Series02/03 boxes)
8. TRIG – MA Panel Connector for TRIG (for future use)
9. GPS – SMA Panel Connector for GPS (for future use)
10. CLOCK – SMA Panel Connector for CLOCK (for future use)
11. 1PPS – SMA Panel Connector for 1PPS (for future use)

Solutions

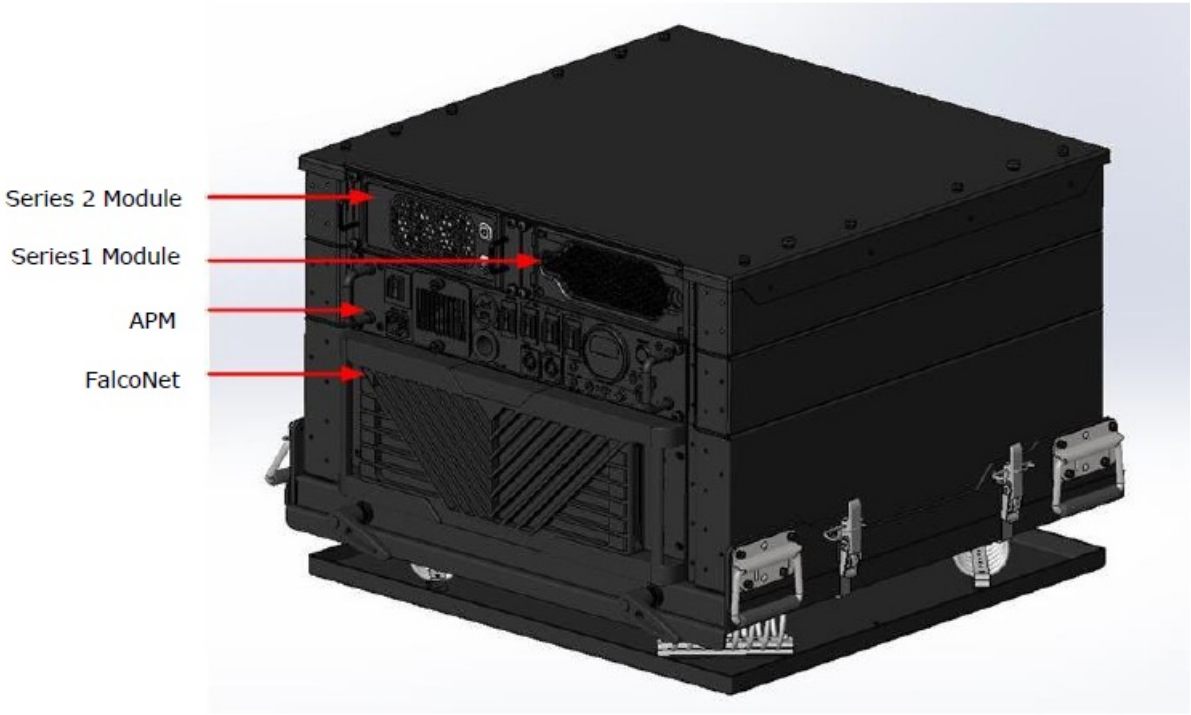
There are two design solutions:

- Standalone – for desktop solution
- Rack mounted – for vehicle solution

Standalone



Rack mounted



Antenna Options

- Antenna Cable LMR240-3m or Spuma400-6m depending on customer needs
- Directional antenna
  - Frequency range – 617Mhz-4200Mhz
  - Gain – > 8dBi (617-960Mhz), 10dBi (1700-2700Mhz), 13dBi (3300-4000Mhz)

- Impedance – 50 Ohms
- Max. input power 90 Watts
- Polarization – Vertical

Cables

- 3 meters LMR240
- 6 meters SPUMA 400 only

RF Exposure Information

In the table below, Power and Gain are entered in units of dBm and dBi respectively and conversions to linear forms are used for the calculations.

Single Chain and non-colocated transmitters								
Band	Mode	FCC Limit (mW/cm^2)	Output AVG Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Duty Cycle (%)	EIRP (mW)	Separ. Distance FCC (cm)
LTE Band 77	QPSK	1.00	29.00	13.00	42.00	100.0	15848.93	35.52
LTE Band 78	QPSK	1.00	19.00	13.00	32.00	100.0	1584.89	11.23

1. The manufacturer configures output power so that the maximum power after accounting for manufacturing tolerances, will never exceed the maximum power level measured
2. The output power in the table above is the maximum power per chain among various channels and various modes within the specific band
3. The antenna gain in the table above is the maximum antenna gain among various channels within the specified band

FCC Information

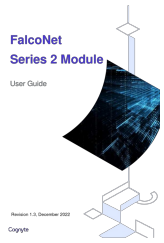
Supplier’s Declaration of Conformity
47 CFR § 2.1077 Compliance Information

FCC ID: 2A7A2-S2
Unique identifier: Series02 Box

Responsible party – US contact information
Cognyte Software LP
35 Pinelawn Road, Suite 204, Melville, NY, 11747
www.cognyte.com

FCC Compliance statement subject to Part 15.105
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Documents / Resources

	Cognyte S2 FalcoNet Series 2 Module [pdf] User Guide 2A7A2-S2, 2A7A2S2, S2 FalcoNet Series 2 Module, S2, FalcoNet Series 2 Module, Module

References

- Cognyte | Actionable Intelligence for a Safer World™
- Cognyte | Actionable Intelligence for a Safer World™