

FalcoNet

Series 2 Module

User Guide

Revision 1.3, December 2022

Cognyte



© 2021, 2022 Cognyte Software Ltd. All Rights Reserved Worldwide. Confidential and Proprietary Information of Cognyte Software Ltd.

All materials (regardless of form and including, without limitation, software applications, documentation, and any other information relating to Cognyte, its products or services) are the exclusive property of Cognyte Software Ltd. Only expressly authorized individuals under obligations of confidentiality are permitted to review materials in this document. By reviewing these materials, you agree to not disclose these materials to any third party unless expressly authorized by Cognyte, and to protect the materials as confidential and trade secret information. Any unauthorized review, retransmission, dissemination or other use of these materials is strictly prohibited. If you are not authorized to review these materials, please return these materials (and any copies) from where they were obtained. All materials found herein are provided "AS IS" and without warranty of any kind. Cognyte Software Ltd does not warrant, guarantee or make any representation regarding the use or the results of the use of the information, links, tools, and materials in terms of the accuracy, reliability, quality, validity, stability, completeness, correctness, or otherwise of its content or products. The entire risk as to the use, results and performance of information, links, tools and materials provided or referenced herein is assumed by the user. Cognyte Software Ltd shall not be liable for damages resulting from the use, misuse or unlawful use of the information, links, tools, and materials contained or referenced herein.

Any third party technology that may be appropriate or necessary for use with the Cognyte Product is licensed to you only for use with the Cognyte Product under the terms of the third party license agreement specified in the Documentation, the Software or as provided online at www.cognyte.com/thirdpartylicense. You may not take any action that would separate the third party technology from the Cognyte Product. Unless otherwise permitted under the terms of the third party license agreement, you agree to only use the third party technology in conjunction with the Cognyte Product.

The Cognyte Software Ltd products are protected by one or more U.S., European or International Patents and other U.S. and International Patents and Patents Pending.

All marks referenced herein with the ® or TM symbol are registered trademarks or trademarks of Cognyte Software Ltd or its subsidiaries.



All rights reserved. All other marks are trademarks of their respective owners.
Please visit our website at www.cognyte.com/intellectualpropertynotice for updated information on Cognyte Intellectual Property.

Table of Contents

1 INTRODUCTION 2

2 SERIES 2 MODULE OVERVIEW..... 3

3 HARDWARE CONFIGURATION 4

 Interfaces 4

4 SOLUTIONS 6

 4.1 Antenna Options 7

5 RF EXPOSURE INFORMATION 8

6 FCC INFORMATION 9

 Supplier’s Declaration of Conformity 47 CFR § 2.1077 Compliance Information 9

 FCC Compliance statement subject to Part 15.105 9

1 Introduction

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

2 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° to 45°C
Storage Temperatures	-20° to 65°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

3 Hardware Configuration

Interfaces

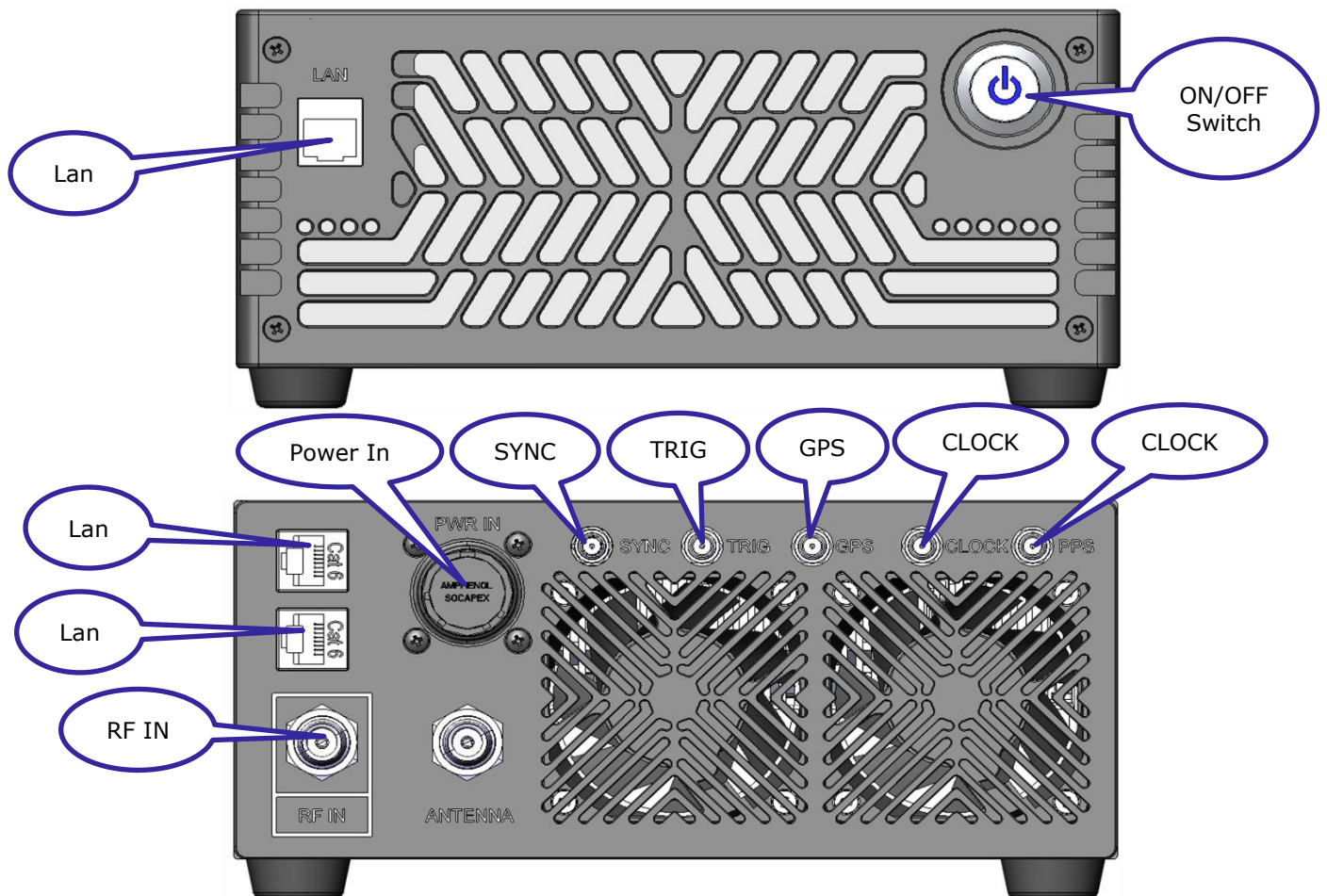


Figure 1 5G Box Front and rear panel

Front Panel:

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

Rear Panel:

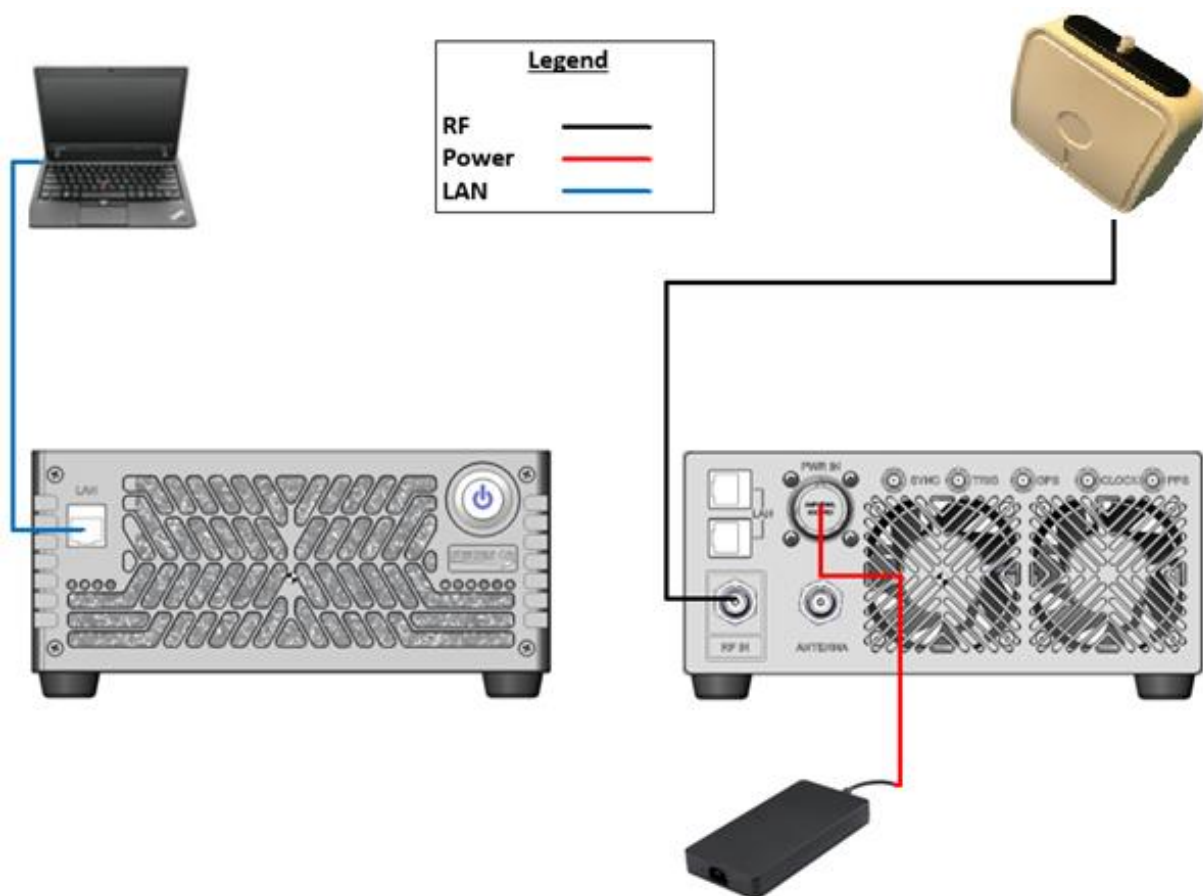
3. LAN- 2x RJ45 panel mount adaptors
4. Power IN - 4 way Amphenol Power In connector
5. RF IN - QN-type connector RF in from external Gi2s or Series01 systems
6. Antenna - QN-Type connector RF out to 5G support Antenna
7. Sync - SMA Panel Connector for dual box Sync (connect two or three Series02/03 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)

4 Solutions

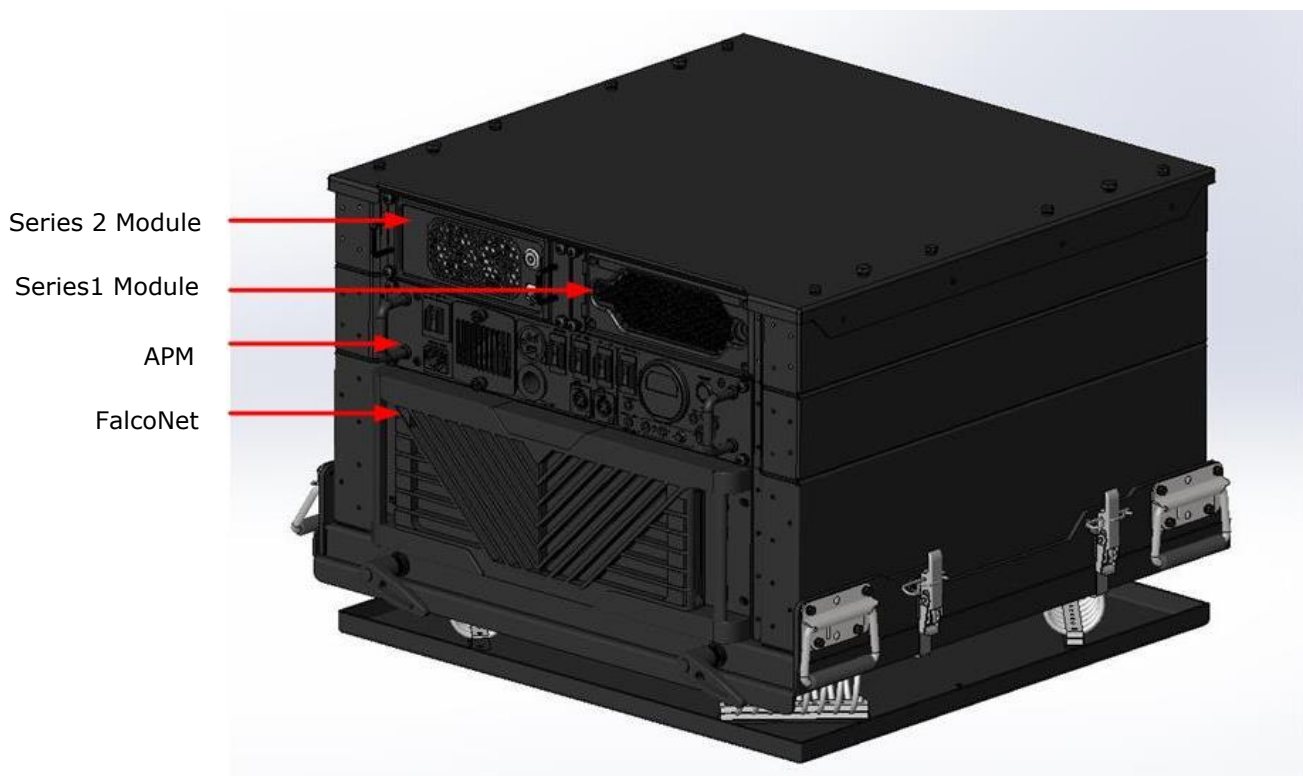
There are two design solutions:

- 12. Standalone – for desktop solution
- 13. Rack mounted – for vehicle solution

Standalone



Rack mounted



4.1 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

5 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

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

6 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.