PRODUCT DATASHEET

Wireless for OPTA Datasheet

The Blues Wireless for OPTA Expansion Module adds cellular capability to any OPTA micro PLC.

Last Revised April 3, 2026

© 2026 Blues Inc. All rights reserved.

Blues Wireless for OPTA Datasheet

The Blues Wireless for OPTA Expansion Module adds cellular capability to any OPTA micro PLC.

Product Overview

The OPTA micro PLC is available from Finder and Arduino in several variants, offering Ethernet, RS-485, and WiFi/Bluetooth connectivity, and is programmable with either CODESYS or Arduino IDE depending on the model. The Blues Wireless for OPTA expansion module allows customers to add cellular connectivity via a pluggable module that uses the standard AUX expansion port on the OPTA, and can be daisy-chained with other expansion modules. The OPTA communicates with the Wireless for OPTA Expansion and its Notecard via I2C, using Blues' note-arduino library from Arduino IDE or the CODESYS I2C library from CODESYS, to configure the Notecard and its backhaul.

The Blues Wireless for OPTA features dual connectivity options with automatic failover from cellular to WiFi. Available in variants for North America (LTE Cat 1) or EMEA (LTE Cat 1), the expansion module provides 500MB of pre-paid data and 10 years of service in over 139 countries with no activation fees or monthly commitments. The 500MB will last until consumed, or until the 10 years of service ends, whichever comes first.

Product Images

Front	Right Side	Left Side

© 2026 Blues Inc. All rights reserved.

Key Features

- **Voltage:** 12…24 V Supply Voltage.
- **Cellular:** Cellular communications powered by the Notecard (LTE Cat 1 North America or LTE Cat 1 EMEA) including 500 MB of data and 10-years of service with no activation fees or monthly commitments. External SIM slot for bringing your own Cellular connectivity.
- **Cloud Integration:** Network backhaul via Blues Notehub cloud service, with support for AWS, Azure, GCP, Snowflake, and dozens of other cloud services.
- **Onboard Components:** Communication test button and Neopixel for connectivity status.
- **Programming/Debugging:** USB C port for direct Notecard programming and debugging.
- **Power Backup:** Power outage detection and notification via an integrated Lithium-Ion Capacitor.

© 2026 Blues Inc. All rights reserved.

Product Benefits

- **Turnkey Wireless Connectivity**

  The Blues Wireless for OPTA enables you to connect your OPTA micro PLC to the cloud with just a few lines of code.

- **Effortless Data Routing to Any Cloud**

  Route your data to any cloud, including AWS, Azure, GCP, Snowflake, and more, using Notehub’s intuitive "no code" interface.

- **Fast-Track Your Time to Market**

  With pre-provisioned connectivity and an intuitive, low-code JSON interface, the Wireless for OPTA reduces your time to market from years to months.

- **Industry-Leading Security**

  Industry-leading security from device authentication through an integrated secure element to encrypted "off-the-internet" communications and private VPN tunnels.

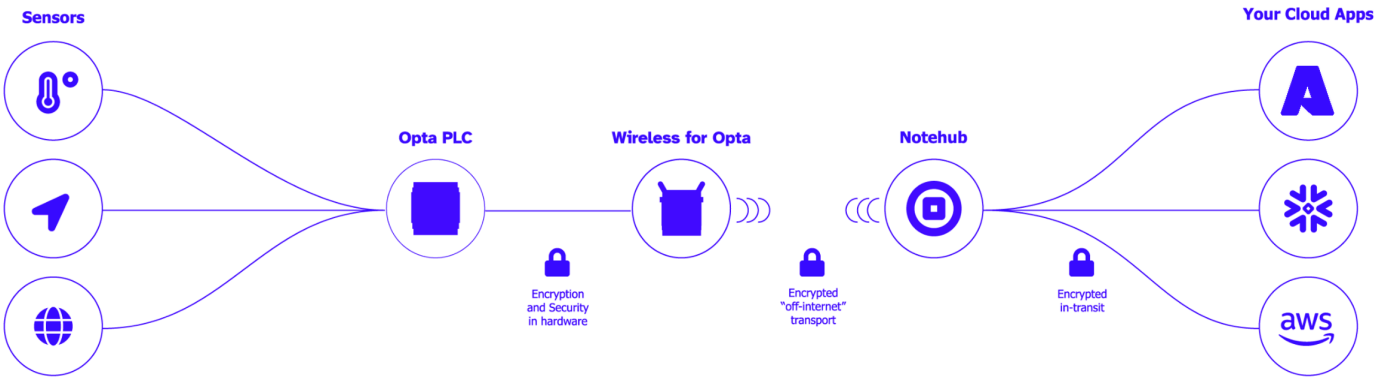
- **Power Outage Detection To Reduce Downtime**

  An onboard backup power supply allows the Expansion to detect outages and send operators outage alerts, ensuring rapid response and uninterrupted operations.

Typical Application

Build	Integrate	Configure
Connect the Wireless for OPTA Expansion to your OPTA PLC via a 10-pin AUX connector.	Set up the Expansion in minutes using the Notecard's award-winning hardware and firmware interface.	Create bi-directional dataflow from your PLC through Notehub to your cloud app.

© 2026 Blues Inc. All rights reserved.



© 2026 Blues Inc. All rights reserved.

Technical Specs

Characteristics	Details
Input	AUX Serial input for OPTA to Expansion communication and configuration over I2C
Backup Power Supply	Vinatech VEL13353R8257G Lithium-Ion Capacitor with 250F @ 3.8V
Processor	STM32U575OIY6QTR ARM® Cortex®-M4 core up to 160 MHz
Antennas	2 x SMA connectors with 2 LTE antennas included
Connectivity	LTE Cat 1 (North America or EMEA) and second SIM slot feature (bring your own connectivity)
Security	Integrated STSAFE Secure element on Notecard
Memory	2 MB of Flash, 768 KB of SRAM on Notecard
Supply Voltage	12…24 V DC
Clock	Clock time set and managed by Notecard via network communication
Expandability	AUX Serial Port exposing UART and I2C communication interfaces enabling the connection of additional expansions in daisy chain.
Operating Temperature	-40 °C to +90 °C
IP Protection	IP20

© 2026 Blues Inc. All rights reserved.

Related Products

The Blues Wireless for OPTA is compatible with the following OPTA micro PLCs.

- Finder OPTA Codesys (type 8A.04.9.024.832C), included in the Wireless for OPTA Bundle
- Finder OPTA Arduino Pro (types 8A.04.9.024.8300, 8310, and 8320)
- Arduino Opta Lite
- Arduino Opta RS485
- Arduino Opta WiFi

© 2026 Blues Inc. All rights reserved.

Certifications

CE

CE certification indicates that a product complies with the essential requirements of relevant European health, safety, and environmental protection legislation. It is a mandatory conformity mark for products sold within the European Economic Area (EEA).

European Union (CE RED)

This Notecard is CE-marked for the EU/EEA in accordance with the Radio Equipment Directive (RED) 2014/53/EU, as documented in an EU Declaration of Conformity (DoC). Compliance with RED is demonstrated through conformance to applicable harmonized standards covering radio performance, EMC, safety, and cybersecurity.

Warning

EN 18031-1:2024 is the harmonized standard defining cybersecurity requirements for network protection. The conformity assessment was performed via manufacturer self-declaration supported by third-party testing.

This compliance assumes Notecard data is routed off-internet via the Blues-provided secure network path using the embedded SIM and Blues Notehub. Customers must not enable configurations that bypass that path. Specifically: do not use a secondary SIM for alternate cellular connectivity and do not enable WiFi transport for data traffic (WiFi may be used for WiFi Triangulation only).

Certification	Date
EN 55032: 2015/A11:2020 Class B	March 2025
EN 55032: 2015/A1:2020 Class B	March 2025
EN 55035: 2017	March 2025

© 2026 Blues Inc. All rights reserved.

Certification	Date
EN 55035: 2017/A11:2020	March 2025
EN 55032: 2015/A11:2020 Class B	March 2025
EN 301 511 V12.5.1	February 2025
EN 301 908-1 V13.2.1	February 2025
EN 301 489-1 V2.2.3	March 2025
EN 301 489-17 V3.3.1	March 2025
EN 301 489-52 V1.3.1	March 2025
EU RoHS (2011/65/EU & 2015/863)	February 2025
EU REACH (1907/2006)	February 2025
EU Declaration of Conformity	January 2025
UK Declaration of Conformity	March 2025
UK PSTI Statement of Compliance	January 2025
CE Safety EN 62368-1	April 2026

FCC

FCC certification indicates that a product complies with the regulations set forth by the Federal Communications Commission (FCC) in the United States. This certification ensures that electronic devices do not emit electromagnetic interference that could disrupt other electronic devices and communication systems.

FCC IDs: XMR202008EG91NAXD

© 2026 Blues Inc. All rights reserved.

Certification	Date
47 CFR FCC Part 15, Subpart B Class B: 2023	March 2025
47 CFR Part 15 Subpart C	February 2025
47 CFR Part 22 Subpart H	February 2025
47 CFR Part 24 Subpart E	February 2025
47 CFR Part 27 Subpart L	February 2025
47 CFR Part 90 Subpart S	February 2025
47 CFR Part 11.1320	July 2020
47 CFR Part 2.1091	September 2019
47 CFR Part 1.1310	September 2019
FCC Declaration of Conformity	March 2025

PTCRB

PTCRB certification is a certification process for mobile and cellular devices that ensures they meet the necessary standards and specifications for operation on North American cellular networks. PTCRB (PCS Type Certification Review Board) was established by North American cellular operators to define test specifications and methods to ensure device interoperability.

Download the PTCRB Certificate of Compliance

© 2026 Blues Inc. All rights reserved.

Ordering Information

Blues Shop

© 2026 Blues Inc. All rights reserved.

Terms and Conditions

Visit Blues Hardware Terms & Conditions.

© 2026 Blues Inc. All rights reserved.

Revision History

Author	Date	Summary
Rob Lauer	12 AUG 2024	Initial version
Brandon Satrom	03 APR 2026	Added Certifications

© 2026 Blues Inc. All rights reserved.

Contact Information

Blues Inc.
https://blues.com
50 Dunham Ridge Suite 1650
Beverly, MA 01915
support@blues.com

© 2026 Blues Inc. All rights reserved.