



E-IOT-NODE-MESH-NC868-CR123A and E-IOT-NODE-MESH-NC915-CR123A are smart wireless sensor network nodes that operate on the 868 MHz and 915 MHz ISM bands, respectively. They utilize the NeoMesh protocol and feature a built-in matched PCB trace antenna.

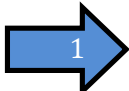
E-IoT Datasheet

E-IOT-NODE-MESH-NCxxx-CR123A



e-iot © Endrich R&D Hungary Kft.

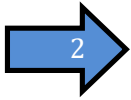
Technical Datasheet for **EIoT-NODE-MESH-NCxxx-CR123A**



Contents

1. Product Overview	2
2. Part numbering.....	3
3. Technical Specifications.....	4
Wireless Communication:	4
Onboard Sensors –	4
▪ Analog Sensor Module (Ambient Light, Magnetic, Temperature).....	4
▪ Temperature and Humidity Sensor Module.....	4
▪ RGB Indicator module	4
▪ Network Discovery Module.....	5
4. Operational description and conditions.....	5
5. Electrical Characteristics	6
▪ The power source.....	6
▪ The RF parameters of the communication module.....	6
▪ The antenna	8
▪ The SHT45 temperature and humidity sensor	9
▪ The ALS-PDIC15-21C/L230/TR8 ambient light sensor	9
▪ The AH352XQ omnipolar HALL-effect switch.....	10
▪ The MCP970X analog temperature sensor	11
6. Mechanical Specifications.....	11
7. Environmental Ratings	12
8. Regulatory Compliance (UNDER APPROVAL)	12
9. Software Architecture and Operating Modes.....	12
Available Operating Modes and Firmware Profiles.....	12
Message Format: Node to Gateway (Uplink).....	13
Message format for RSSI Discovery Mode	14
Message Format: Gateway to Node (Downlink)	15
Firmware Deployment and Updates.....	15
10. Application Examples	16
11. Labelling and marking	16
12. Revision History.....	17
12. Compliance Logos	17

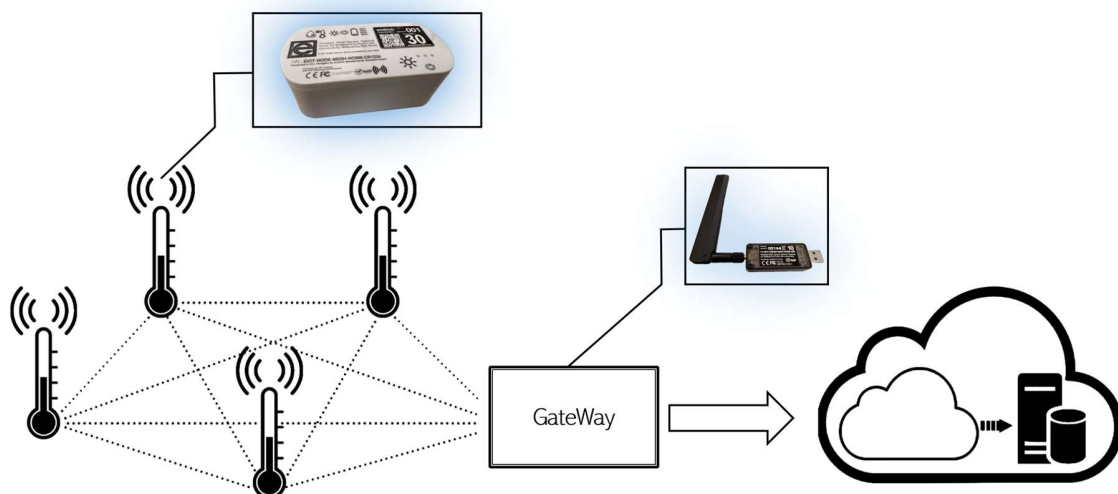
Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**



1. Product Overview

EIOT-NODE-MESH-NC868-CR123A and **EIOT-NODE-MESH-NC915-CR123A** are smart wireless sensor network nodes that operate on the 868 MHz and 915 MHz ISM bands, respectively. They utilize the NeoMesh protocol and feature a built-in matched PCB trace antenna.

The smart sensor network module node is a key component of the **Endrich E-IoT platform**, which combines intelligent sensing with low-power wireless mesh networking. At the heart of this solution is the **NeoCortec Neo.Mesh protocol**, a patented wireless communication technology optimized for **sub-GHz frequencies** (868/915 MHz), provides superior range and reliability in harsh industrial environments.



Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**

The system enables the deployment of **ultra-low-power sensor networks**, where each sensor node communicates autonomously within a **self-healing, ad-hoc mesh network**. This architecture eliminates the need for a centralized network controller, allowing **scalable and resilient communication** across thousands of nodes. Data collected by the sensors is relayed through a **local gateway**, which functions as a **LoRa/Mesh to LPWAN bridge**, and transmitted to the Cloud via **LTE-M or NB-IoT cellular networks**.

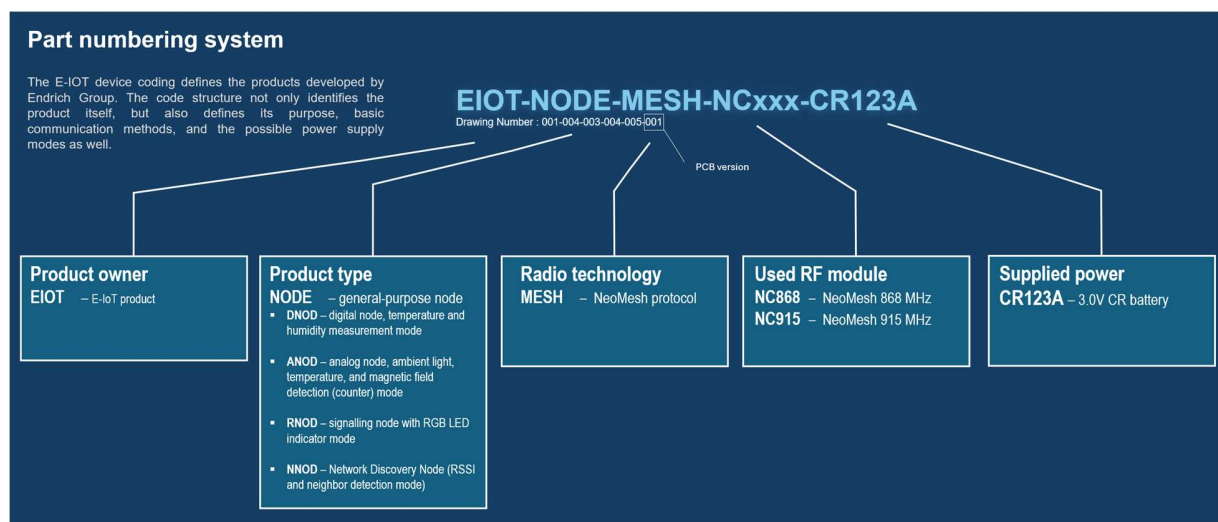
Engineered for **predictive maintenance** and **smart infrastructure applications**, this platform transforms conventional devices into fully connected IoT endpoints. The mesh protocol features **AES128 encryption**, ensuring secure and tamper-proof wireless communication. Its **synchronized sleep mode** drastically reduces power consumption, extending **battery life up to several years**, even under continuous operation.

Designed for reliability and adaptability, the system maintains connectivity even in dynamic or obstructed RF environments. New nodes can be added effortlessly to extend coverage or reinforce weak points, making it ideal for large-scale installations in **factories, commercial buildings, smart cities, and logistics facilities**.

By combining **robust communication, low energy consumption**, and **scalability**, this smart sensor solution is powered by Neo.Mesh provides a future-proof foundation for industrial IoT deployments.

2. Part numbering

For the easy definition of the product, a logical part numbering system has been applied according to the rules below:



Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**

4

3. Technical Specifications

Wireless Communication: The smart sensor uses a built-in radio module, which has been designed to comply with most national requirements for worldwide operation. The smart modules come in two versions: **EIOT-NODE-MESH-NC868-CR123A**, which is intended for use in the 868 MHz frequency band, and **EIOT-NODE-MESH-NC915-CR123A**, which is intended for use in the 915 MHz frequency band. The smart sensor modules share a wireless local network with a common NETWORKID, while they have a unique NODEID. See the figure in section 9 about marking and labelling the sensor modules. The usage requires an appropriate E-IOT gateway device sharing the same NETWORKID and having NODEID=10.

Onboard Sensors – Depending on initial firmware settings, there are several operation modes for these smart sensor nodes:

- **Analog Sensor Module (Ambient Light, Magnetic, Temperature)**

This operation mode is designed to support the measurement of the intensity of visible light at the first place. It features an **analog voltage output** proportional to the detected light level within the visible spectrum. The signal is digitized by ADC2, part of the NeoCortec module's integrated A/D converter. Additionally, the module monitors the **voltage of the onboard battery** via the ADC1 input, enabling power management and diagnostics.

The module also includes a **Hall-effect counter**, capable of registering magnetic field changes during the measurement intervals. When paired with a suitable magnet, this function is ideal for **detecting and counting door openings** or similar magnetic proximity events. Last but not least, an NTC took place on the board for **Temperature measurement** (ADC3)

- **Temperature and Humidity Sensor Module**

This operational mode utilizes the **I²C digital interface** of the NeoCortec platform to communicate with an onboard **Sensirion SHT45** sensor for accurate **temperature and humidity** measurement.

- **RGB Indicator module**

This enhanced configuration mode is utilized by **RGB indicator LEDs**, which can be remotely controlled through **bidirectional communication** over the Neo.Mesh network. This allows not only sensor-to-cloud data transmission but also **cloud-to-node command delivery** via the gateway. The RGB LED can be configured from the cloud to serve as a **visual indicator**, providing alerts, status updates, or simple feedback signals. This feature makes the module suitable for **interactive applications, demonstrations**, or real-time network health signaling.

Technical Datasheet for **EIoT-NODE-MESH-NCxxx-CR123A**

5. Network Discovery Module

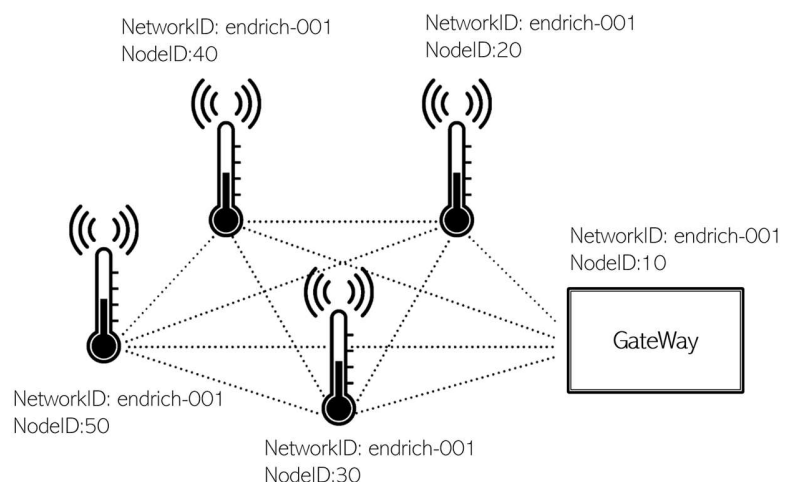
The module's firmware includes a feature that allows it to send payload data containing a list of neighboring nodes along with their corresponding RSSI values. This capability is instrumental in assessing network health and topology. To utilize this feature, the internal radio module is configured to periodically transmit RSSI data. The interval for these transmissions has been preset to 60 seconds. Each payload contains up to 12 entries, with each entry comprising a Node ID and its corresponding RSSI value in dBm. This information enables the construction of a real-time map of network connectivity and signal strength. By deploying nodes configured to report RSSI data, you can:

- Identify optimal locations for new nodes based on signal strength.
- Detect and address weak spots or potential points of failure in the network.
- Monitor changes in the network topology over time.
- This proactive approach to network management enhances reliability and performance, especially in dynamic environments where node positions or environmental conditions may change.

4. Operational description and conditions

The **EIoT-NODE-MESH-NCxxx-CR123A** needs a CR123A battery to operate; it will automatically start the built-in protocol once energized. It will continue its operation until the battery is empty, usually after years, depending on the external circumstances (signal path properties, transmission intervals, availability of acknowledging destination device) Based on the predefined settings uploaded in the factory, the node starts to collect data with the defined frequency from the on-board sensors and transmit it to the mesh network as a short telegram.

The node requires one of the available E-IoT gateway devices (EIoT-xGW-MESH-NCxxx-xxx) to operate and send data to one of the available Cloud services. The gateway device should share the same NETWORKID with all the nodes within the same network. The user can operate a large number of nodes in one network, providing them with unique NODEIDs, and can also operate several networks in the same physical location as long as their NETWORKIDs are different.



Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**

5. Electrical Characteristics

▪ The power source

The device is powered by a single **CR123A manganese dioxide lithium cell** (recommended type: **Panasonic's CR123A**) due to its high reliability, stable discharge characteristics, and extended shelf life. This battery type is well-suited for low-duty-cycle wireless IoT devices thanks to its **high energy density** and **wide operating temperature range**, ensuring dependable operation even in harsh industrial or outdoor environments. The battery supports **multi-year autonomous operation** of the sensor module, depending on the communication interval and sensor activity. The battery compartment is accessible via the device's **removable top cover** and is secured with a **snap-in plastic locking clip**, providing both mechanical stability and protection against unintentional access. This design prevents accidental removal and complies with child safety considerations, making the product robust and secure for industrial, commercial, or public deployment.

Electrical parameters:

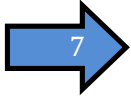
Nominal voltage		3V
Nominal capacity		1,550mAh
Continuous drain		20mA
Dimensions*1	Diameter (Max.)	17.0mm
	Height (Max.)	34.5mm
Weight*1		Approx. 16.0g
Operating temperature		-40°C to +70°C

*1 Without tabs.

▪ The RF parameters of the communication module:

The integrated RF module is based on **NeoCortec's NC1000 series**, designed specifically for **ultra-low-power, license-free sub-GHz communication**. Operating in both **868 MHz and 915 MHz ISM bands**, the module supports reliable mesh networking through the **NeoMesh protocol**. It features a **programmable transmit power range from -30 dBm to +10 dBm**, and a **receiver sensitivity of up to -94 dBm**, enabling long-range and robust connectivity. The module complies with **ETSI (EN 300 220/328)** and **FCC Part 15** standards, and incorporates **advanced RF filtering and spurious emission control**, ensuring optimal performance and regulatory compliance.

Technical Datasheet for **EIoT-NODE-MESH-NCxxx-CR123A**



Parameter	Min	Typ	Max	Unit	Condition
Receiver sensitivity	-94	-93		dBm	868MHz and 915MHz, 1% packet loss
Saturation		-16		dBm	
Spurious emissions (conducted)					50 Ω single-ended load
25 MHz - 1 GHz			-57	dBm	Complies with EN 300 328, EN 300 220 class 2, FCC CFR47, Part 15, ARIB STD-T-66
Above 1 GHz			-47	dBm	
Output power (max)	+10			dBm	Delivered to 50 Ω load via U.FL connector
Output power (min)	-30			dBm	Delivered to 50 Ω load via U.FL connector
Radiated harmonics					
2nd harmonic, 868MHz			-55	dBm	@+10dBm output
3rd harmonic, 868MHz			-54	dBm	@+10dBm output
Conducted harmonics					
868MHz			-35	dBm	@+10dBm output
915MHz			-34	dBm	@+10dBm output
Spurious emissions radiated (harmonics excluded)					+10 dBm CW output
868MHz: Below 1GHz			-56	dBm	
868MHz: Above 1GHz			-54	dBm	
868MHz: 47-74 MHz			-56	dBm	
868MHz: 87.5-118 MHz			-56	dBm	
868MHz: 174-230 MHz			-56	dBm	
868MHz: 470-862 MHz			-56	dBm	
915MHz: Below 1GHz			-51	dBm	
915MHz: Above 1GHz			-60	dBm	

Technical Datasheet for **EIoT-NODE-MESH-NCxxx-CR123A**

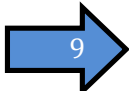
■ The antenna

For optimal performance in sub-GHz wireless communication, the module features a **custom-tuned, matched PCB trace antenna**. Designed to support both **868 MHz and 915 MHz ISM bands**, this antenna provides excellent efficiency, with over **88% radiation efficiency** and a **peak gain of 1.4 dBi**. Its **linear polarization** and **omnidirectional (spherical) radiation pattern** ensure reliable connectivity and consistent signal strength across diverse installation environments, making it well-suited for mesh network deployments.

Antenna and electrical specifications:

Parameter	868 MHz ISM Band Antenna	915 MHz ISM Band Antenna
Standards	NeoMesh	NeoMesh
Band (MHz)	868	915
Frequency (MHz)	863–870	902–928
Return Loss (dB)	< -12	< -12
VSWR	1.5 : 1	1.5 : 1
Efficiency (%)	88	89
Peak Gain (dBi)	1.4	1.4
Average Gain (dBi)	-2.8	-2.8
Impedance (Ohm)	50	50
Polarization	Linear	Linear
Radiation Pattern	Omni-Directional (spherical)	Omni-Directional (spherical)

Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**



■ **The SHT45 temperature and humidity sensor**

The smart sensor module includes the high-precision **SHT45 digital temperature and humidity sensor** from **Sensirion**, providing industry-leading accuracy and reliability for environmental monitoring.

Key Features:

- **High Accuracy:**
 - Temperature: $\pm 0.1\text{ }^{\circ}\text{C}$ (typ.)
 - Relative Humidity: $\pm 1.0\text{ \%RH}$ (typ.)
- **Measurement Range:**
 - Temperature: $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$
 - Humidity: $0\text{ \%RH}$ to $100\text{ \%RH}$
- **Ultra-Low Power Consumption:**
 - Operates in duty-cycled modes for optimized battery life
 - Ideal for battery-operated IoT sensor nodes

Interface & Integration:

- **Digital I²C Communication**
- Fully supported by the NeoMesh module's internal firmware via its onboard I²C interface
- Factory-calibrated, linearized, and ready-to-use—no user calibration needed
- The data format is detailed in the software section of this datasheet

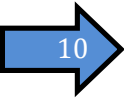
■ **The ALS-PDIC15-21C/L230/TR8 ambient light sensor**

The integrated **ALS-PDIC15-21C/L230/TR8** ambient light sensor enables precise measurement of visible light intensity in a way that closely mimics the human eye's spectral sensitivity. It plays a key role in environment-aware smart sensor systems by offering analog output proportional to ambient light levels.

Key Features:

- **Spectral Responsiveness:** Closely matches human eye sensitivity range
- **Analog Light-to-Current Output:** Excellent linearity over a wide dynamic range

Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**

10

- **Infrared Light Rejection:** Reduces error from IR sources
- **High Stability and Accuracy:** Low variation across light types
- **Temperature Operating Range:** -40 °C to +85 °C
- **Compact Form Factor:** 3.2 mm × 1.5 mm × 1.05 mm
- **RoHS and Pb-Free Compliant**

Electrical Characteristics:

- Supply Voltage: 2.5 V to 5.5 V
- Typical Light Current at 100 Lux: 36–95 µA (at Vcc = 3V)
- Saturation Output Voltage: >2.2 V at 100 Lux and RL = 75 kΩ
- Switching Time: Rise time ~0.36 ms, Fall time ~1.11 ms

Integration:

The sensor provides an analog output signal, which is connected to the NeoCortec module's ADC input. The signal is converted into a digital value and included in the transmitted data frame, enabling remote monitoring of light intensity via the NeoMesh wireless protocol.

▪ **The AH352XQ omnipolar HALL-effect switch**

The sensor board features the **AH352XQ** high-sensitivity, omnipolar Hall effect switch, optimized for **industrial applications** requiring contactless proximity and magnetic counting.

Key Features:

- **Omnipolar Operation** – Responds to both north and south magnetic poles.
- **Wide Supply Range:** 3.0 V to 28 V with reverse polarity protection up to -18 V.
- **High Sensitivity:** Typical operation and release thresholds:
 - BOP: ±20–40 Gauss
 - BRP: ±10–25 Gauss
- **Chopper-stabilized design** for excellent temperature stability and minimal switch point drift.
- **Output:** Open-drain configuration with Zener clamp and overcurrent limit.
- **Response Time:** Fast output switching with <4 µs delay and <1 µs rise/fall times.

Technical Datasheet for **EIoT-NODE-MESH-NCxxx-CR123A**

11

- **Robustness:**
 - ESD protection up to 8kV (HBM)
 - Overvoltage clamp ($V_Z \approx 28\text{ V}$)
 - Load dump tolerance (40 V)
- **AEC-Q100 qualified**, Grade 0, supporting operation from **-40°C to +150°C**.
- Available in compact SOT23 and SIP-3 packages.

▪ **The MCP970X analog temperature sensor**

The TX03 is a precision **analog temperature sensor** designed for reliable operation in **space-limited and low-power applications**. It features a simple voltage output that is **linearly proportional to the ambient temperature**, making it directly compatible with the ADC inputs of the NeoCortec NC1000 module.

Key Features:

- **Analog Voltage Output:** Linear temperature-to-voltage response
- **Typical Output Slope:** $\sim 10\text{ mV}/^\circ\text{C}$
- **Accuracy:** $\pm 0.5\text{ }^\circ\text{C}$ at $25\text{ }^\circ\text{C}$ (typical)
- **Operating Voltage:** 2.7 V to 5.5 V
- **Low Current Consumption:** $< 50\text{ }\mu\text{A}$
- **Operating Temperature Range:** $-40\text{ }^\circ\text{C}$ to $+125\text{ }^\circ\text{C}$
- **Compact Package:** Suitable for tight PCB spaces

Integration:

The output voltage of the TX03 is directly connected to an **ADC input of the NeoMesh module**. The module's firmware samples the voltage and converts it into a digital temperature value, which is then transmitted wirelessly to the gateway. This analog sensing path provides a **cost-effective** and **flexible** alternative to digital temperature sensors, especially where space or power is constrained.

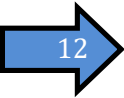
6. Mechanical Specifications

Dimensions: 90 mm x 45 mm x 32 mm (width, length, height)

Net Weight (w/o battery): 50 gr

Mounting: with the bottom mounting plate to any surface, including metal

Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**

12

7. Environmental Ratings

- Operating/Storage Temperature: -30°C to +60°C (applicable for freezers)
- IP Rating: IP51

8. Regulatory Compliance

The used RF module has been CE (RED), FCC certified under FCC ID: 2AB76NC1000C1

9. Software Architecture and Operating Modes

Each NeoMesh-based smart sensor node is equipped with **dedicated firmware** tailored to the sensor configuration and intended function of the node. NeoCortec's architecture enables a **firmware-based profile system**, where each firmware variant supports a specific application scenario using the same underlying mesh communication protocol. This modular approach allows manufacturers and integrators to deploy customized nodes optimized for power, data type, and messaging behavior.

Available Operating Modes and Firmware Profiles

The following **firmware variants** are available and pre-loaded depending on the node's intended sensor configuration:

1. Temperature & Humidity Mode (Digital)

- For digital I²C sensor - the **Sensirion SHT45**
- Periodically measures temperature and humidity
- Formats and sends sensor data in a compact binary frame

2. Ambient Light Sensor Mode (ALS function of Analog Node)

- Supports analog light sensor **ALS-PDIC15-21C**
- Converts analog output to a digital value via ADC
- Sends measured light intensity with node timestamp

3. Magnetic Event Counter Mode (Magnetic counter function of Analog Node)

- Designed for use with Hall switches **AH352XQ**
- Accumulates and transmits count of magnetic events (e.g., door openings)
- Time-stamped message sent at configurable intervals

Technical Datasheet for **EIoT-NODE-MESH-NCxxx-CR123A**

13

4. Analog Temperature Sensor Mode (Temp. Sens. function of Analog Node)

- Interfaces with analog sensor **TX03**
- Periodically samples analog voltage using internal ADC
- Temperature is calculated and formatted for transmission by the user or gateway software

5. Network Discovery / RSSI Survey Mode

- Allows real-time assessment of signal strength and mesh connectivity
- Node transmits **RSSI and hop count information**
- Used during installation and coverage optimization

6. RGB LED Indicator Mode (individual or in combination with Analog sensors)

- Enables remote control of onboard **RGB indicator LED**
- Accepts downlink commands from gateway
- Used for visual feedback, signaling, or demonstration

Message Format: Node to Gateway (Uplink)

Each node communicates via **payload-based data frames**, which are handled by an **EIoTgateway** (e.g., LTE-M/NB-IoT edge device). The gateway is responsible for parsing, buffering, and **forwarding messages to the cloud backend**.

General Uplink Packet Structure:

Field	Size	Description
0x52	1 byte	Packet type: Received Host Data
Payload Length	1 byte	Number of bytes in the following payload
Payload	N bytes	Application-specific data (e.g. sensor)

Example Payload Formats per Mode:

- **Digital Temperature/Humidity Mode**
preId + (temperature) [2 bytes value] + (humidity) [2 bytes value]

Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**

14

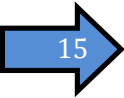
- **Analog Mode (ALS,Temp,Magnetic)**

[3 bytes value] + [2 bytes (magnetic)counter value] +[2 bytes ADC1 value] + [2 bytes ADC2 value] + [2 bytes ADC3 value] +[2 bytes ADC4 value]

Message format for RSSI Discovery Mode

Field	Size	Description
0x10	1 byte	Discovery packet type
Node1 ID	2 bytes	Originating node
RSSI	1 byte	Signal strength in dBm
Node2 ID	2 bytes	Originating node
RSSI	1 byte	Signal strength in dBm
Node3 ID	2 bytes	Originating node
RSSI	1 byte	Signal strength in dBm
Node4 ID	2 bytes	Originating node
RSSI	1 byte	Signal strength in dBm
Node5 ID	2 bytes	Originating node
RSSI	1 byte	Signal strength in dBm
Node6 ID	2 bytes	Originating node
RSSI	1 byte	Signal strength in dBm

Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**

15

Message Format: Gateway to Node (Downlink)

Only specific node profiles (e.g., RGB LED mode) support **downlink messages**. These are sent **via the EIOT gateway** and relayed through the mesh to the addressed node.

RGB LED Control Message Format

The node receives commands in the following binary structure:

Field	Size	Description
-------	------	-------------

0x03	1 byte	Command Start Byte (Control Command)
------	--------	--------------------------------------

Node ID	2 bytes	Target node address
---------	---------	---------------------

Color	1 byte	RED/GREEN/BLUE On/Off variations
-------	--------	----------------------------------

The RGB LED firmware interprets the command and sets the LED color accordingly.

Firmware Deployment and Updates

NeoCortec modules are factory-programmed with a firmware image matching the selected **application profile**. Firmware updates and mode changes are supported via:

- **UART configuration interface** during initial provisioning
- **Over-the-air (OTA)** update mechanism for large installations
- **E-IOT gateway configuration tools**, which can select and install profile types

Firmware modularity ensures that only necessary sensor drivers and message parsers are loaded, thereby optimizing **memory footprint, power consumption, and bandwidth usage**.

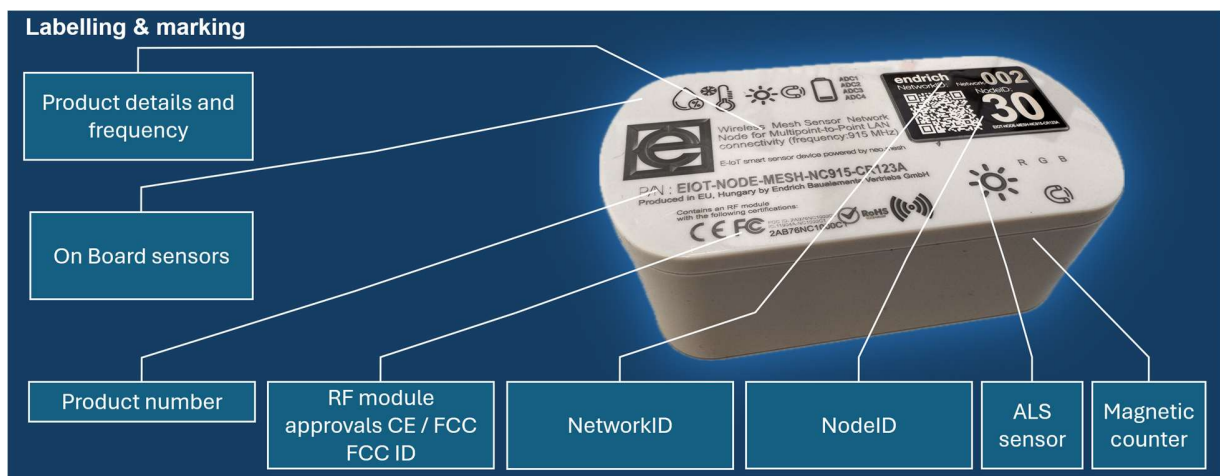
Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**

16

10. Application Examples

- Indoor air quality monitoring
- Industrial and building automation
- HVAC systems
- Smart agriculture and greenhouses
- Smart lighting systems
- Environmental monitoring
- Indoor and outdoor daylight sensing
- Energy-efficient building automation
- Display backlight dimming (phones, TVs, monitors)
- Door and trunk closure detection
- HVAC monitoring
- Remote weather stations
- Smart building automation
- Predictive maintenance of machinery

11. Labelling and marking



Technical Datasheet for EIOT-NODE-MESH-NCxxx-CR123A

17

12. Revision History

Revisions		
Date	Responsible person	Subject of the change
2025.05.30	Zoltán Kiss	Adding the hardware section
2025.06.19	Zoltán Kiss	Adding radiation patterns
2025.08.10	Zoltán Kiss	Adding operation Description, FCC/CE warnings
2025.08.15	Zoltán Kiss	Adding output power for CE
2025.11.14	Zoltán Kiss	Temperature ranges

12. Compliance Logos**FCC Caution:****Product's FCC ID: 2BRCKENNDN9000201****Part 15.21**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Part 15.19

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Technical Datasheet for **EIOT-NODE-MESH-NCxxx-CR123A**

18

Part 15.105

NOTE: 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.

This radio is designed for and classified as “General population/uncontrolled Use”, the guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

CE RED Warning:

1.The operating temperature of the EUT can't exceed 60°C and shouldn't be lower than -30°C.

Hereby, **Endrich Bauelemente Vertriebs GmbH** declares that this product is in compliance with essential requirements and other relevant provisions of Directive 2014/53/EU. This product is allowed to be used in all EU member states.



RF Function	Frequency bands	Maximum output power
SRD (MSK)	863.8-869.2MHz	10,80 dBm (ERP)
SRD (GFSK)	863.3-869.7MHz	10,80 dBm (ERP)