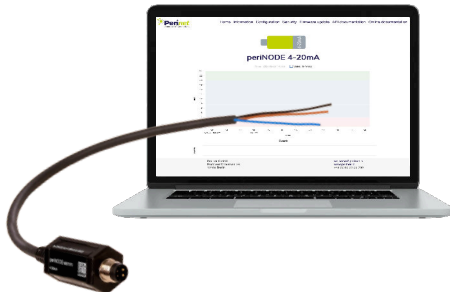# periNODE 4-20mA

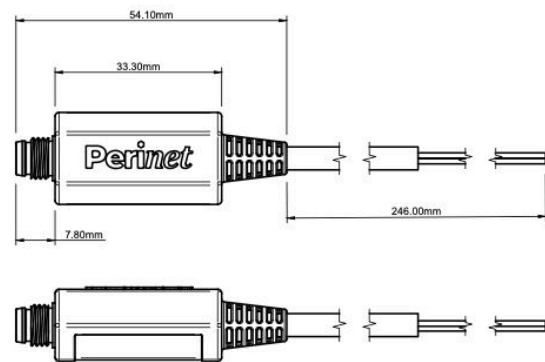## Single Pair Ethernet Sensor Adapter for 4-20mA sensors

The *periNODE 4-20mA* bridges the gap between sensors and IT infrastructure, transforming analog, passive sensors into intelligent, active network devices. It converts sensor data into information and sends it directly via Ethernet to any IT system or data hub. This seamless integration facilitates straightforward data analysis and processing. Our patent-protected technology also allows users to customize data transfer intervals, optimizing network traffic and preventing unnecessary data accumulation.

## Key Features

- Fully operational with One Cable
- Integrated Software Stacks: TCP/IPv6, mTLS, HTTPs, RESTful API
- Integrated WebUI & RESTful API
- Based on *sève OS*, an Operating System for Things
- Customizable Firmware
- On device value transformation
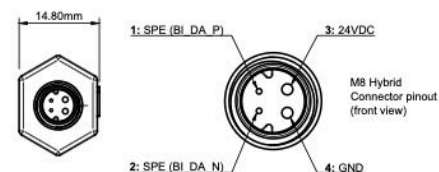
## Dimensions & Pinout



periNODE 4-20mA's dimensions

## Interfaces

- 100BASE-T1 Phy (IEEE 802.3bw, IEC 63717-6)
- 4-20mA / 0-20mA analog input
- HTTPs RESTful API for configuration
- Secure MQTT client



## Operational Parameters

- Operating voltage: 24VDC input
- Sensor Supply Voltage: 24V output
- Temperature range: -40°C to +70°C
- Power consumption: 0.6W
- Protection Class: IP 65/67

periNODE 4-20mA's connector pinning

Product Summary, rev: 1
2025-06-25

https://perinet.io
sales@perinet.io
Tel.: +49 30 863206 777

Perinet GmbH
Rudower Chaussee 29
12489 Berlin
Germany

## Compliance

- CE, REACH
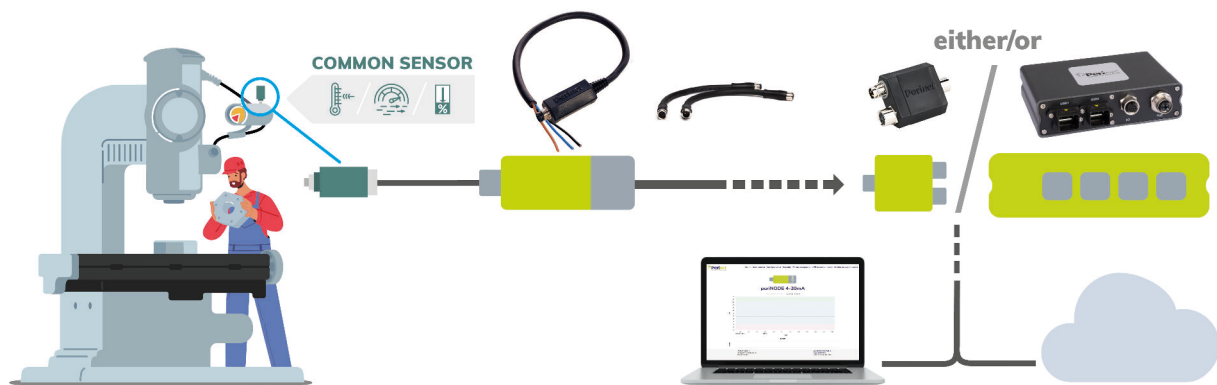- RoHS 3 (EU 2015/863)
- WEEE (2012/19/EU)

## Security

- CRA-ready
- NIST compliant TLS implementation
- Role Based Access Control (RBAC)
- Certificate based client authentication
- AES encryption algorithm
- X.509 certificates & PKIX path validation
- Elliptic Curve Cryptography (ECC)

## Software Features

- Integrated HTTP server with TLS
- Integrated MQTT client with mTLS
- Zero-configuration (mDNS and DNS-SD)
- Full TCP/IPv6 communication stack
- LifeCycle Management,
  remote firmware updates

## Typical Application



Typical installation of the periNODE 4-20mA

## Ordering Information

| Ordering Code | Product Name | Description |
|---|---|---|
| **PRN.000.021** | periNODE 4-20mA | smart adapter for 4 to 20mA signal type |
| Companion Products | | |
| **PRN.000.008** | periSWITCH 3-port | 3-port hybrid SPE switch |
| **PRN.000.003** | periSTART standard | Media converter from SPE to standard Ethernet |
| **PRN.000.017** | periLINE 0.2m | Hybrid SPE cable with M8 connectors |
| **PRN.000.025** | periMICA | Open modular edge computer |
| **PRN.000.020** | periCORE Development Kit | Full featured firmware development setup |