Starter Kit

Seamlessly Connected Ready2Go Smart Sensor Setup

The Single Pair Ethernet (SPE) technology presented in the Starter Kit turns possible the seamless connectivity among sensors and actuators to the cloud. The Starter Kit demonstrates this capability connecting an analogue sensor or an actuator with well known Internet Technologies, like IPv6 and HTTPS. The provided smart sensor adapter transforms an analogue sensor value (e.g. resistance) into a semantically representative metric like a temperature (e.g. degree Celsius °C). Easily access the sensor or command the actuator via your browser.

Targeted Applications

- See an IoT / IIoT in operation
- Industrial control
- Industrial sensors
- Turn passive sensor into active network participant
- Access sensor values with Internet Technologies, e.g. a web browser
- Push sensor values via MQTT to a central data lake
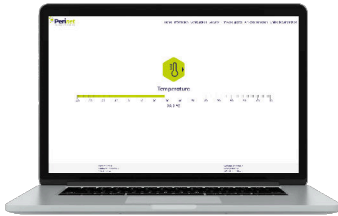- Smart components evaluation
- Retrofitting

Key Features

- periNODE smart adapter
- periSTART media converter
- periLINE hybrid Single Pair Ethernet(SPE) cable

Security

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

Product Summary, rev: 1
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sales@perinet.io
https://perinet.io
Tel.:+4930863206777

Perinet GmbH
Rudower Chaussee 29
12489 Berlin
Germany

Variants Available

Starter Kit Distance	Starter Kit Temperature	Starter Kit GPIO

- periNODE smart single pair ethernet adapter
- Ultra sonic distance sensor (0-10V)
- Smart Adapter takes sensor samples
- User Interface via Browser

- periNODE smart single pair ethernet adapter
- Resistance thermometer sensor output Pt100
- Smart Adapter takes sensor samples
- User Interface via Browser

- periNODE smart single pair ethernet adapter
- Mini contactor for motors and resistive loads
- Actuator receives commands and switches the contactor
- User Interface via Browser

Ordering

Ordering Code	Product Name	Description
PRN.000.005	Starter Kit Distance	Demo kit with periNODE 0-10V and MD sensor.
PRN.000.038	Starter Kit Temperature	Demo kit with periNODE Pt100 and Wika sensor.
PRN.000.064	Starter Kit GPIO	Demo kit with periNODE GPIO and Contactor switch.
PRN.000.002	periNODE 0-10V	smart adapter for 0 to 10V signal type.
PRN.000.006	periNODE Pt100	smart adapter for Pt100 based resistance temperature detector (RTD).
PRN.000.010	periNODE GPIO	smart adapter for GPIO signal type.
PRN.000.003	periSTART standard	hybrid SPE media converter with M8 connector.
PRN.000.017	periLINE 0.2m	hybrid SPE cable with M8 connectors.

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