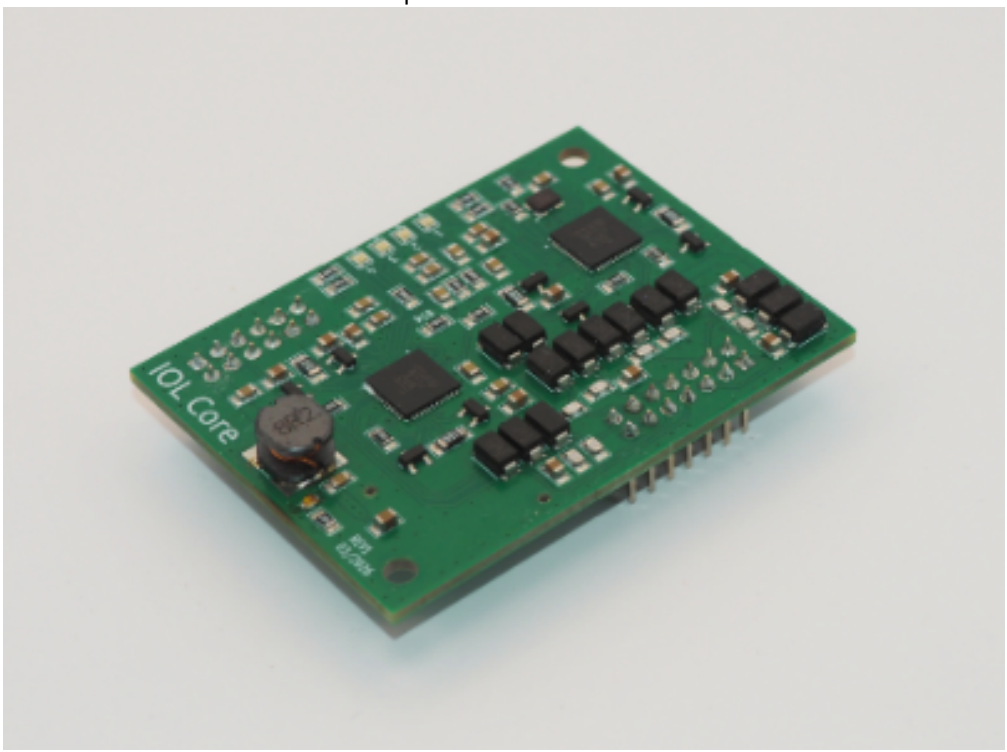
# 4.2 Port configuration and control

Hardware manual

www.pinetek-networks.com

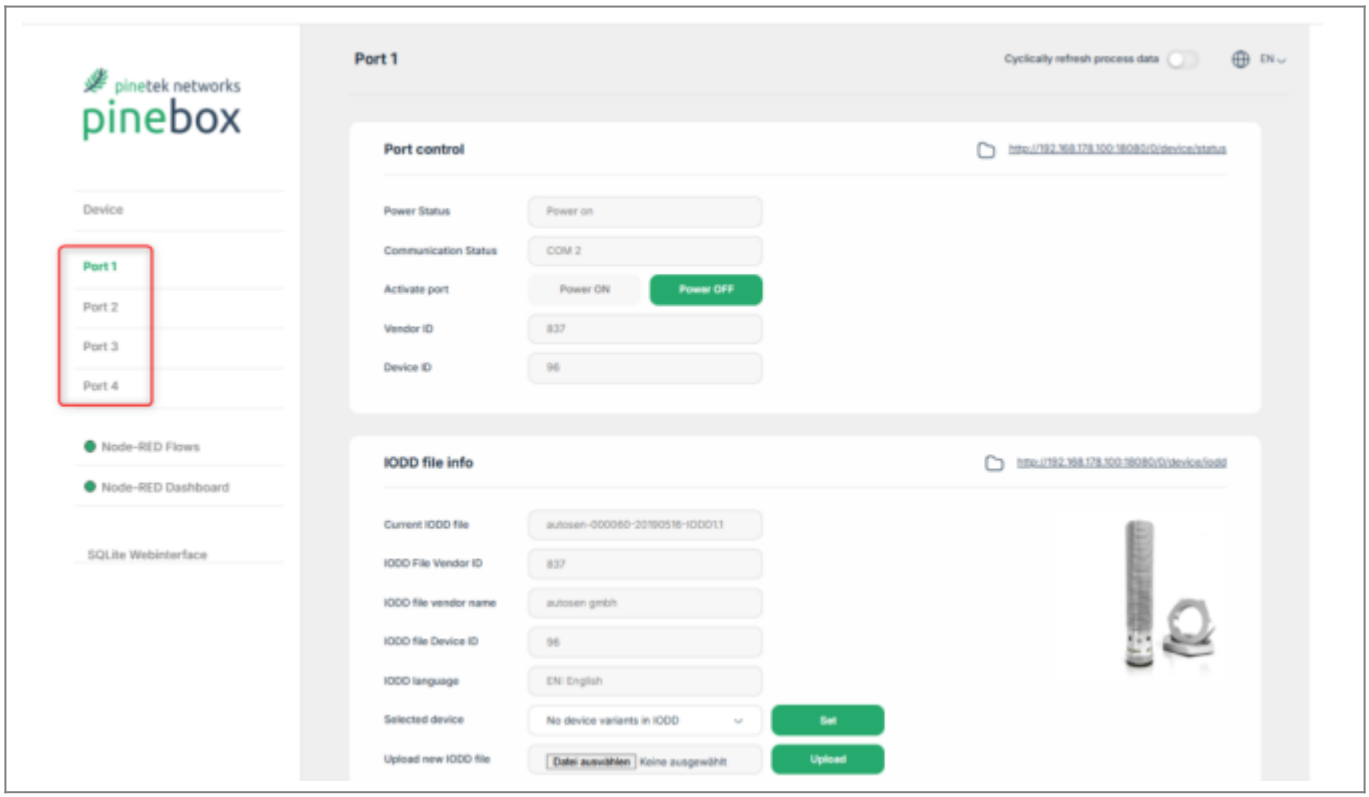


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# 4.2 Port configuration and control

Before you can communicate to a device that is connected to one of the four ports, the device needs to be configured. The configuration is performed over the web interface on the sub-pages for the ports:




## Port configuration

A port can either run as IOL (SDCI) , Input (24V-compatible), our Output (24V driver).

In all modes, enabling the port will switch the L+ (24V) power to the port.

- In IOL mode, the port function is defined by the IODD file provided in the port configuration.
- In Input mode, a 1-bit input process data (PD) image is generated that reads the state of the port.
- In Output mode, a 1-bit output process data (PD) image is generated, that writes the state of the port.

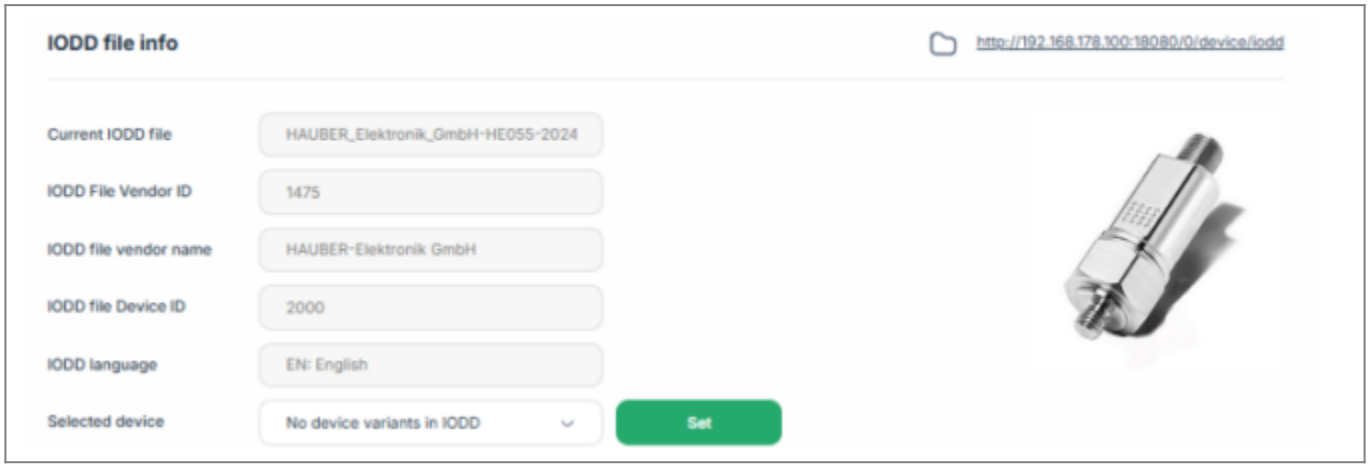
### IOL mode and IODD configuration

The port is configured using an IODD file that describes the features and functions of the IO-Link device. This file is provided by the IO-Link device manufacturer usually per download on the webpage. You can also use the IODD-Finder webpage: ioddfinder.io-link.com

The IODD file comes either as single iodd XML-File or as zip file. The configuration interface of the Pinebox accepts both file formats. Use the upload field to select the IODD files from your PC and load the file by pressing the “Upload” button:




After uploading, you can see the information provided by the IODD, the vendor ID, vendor name and device ID in the information fields:




### Languages

In case the IODD supports multiple languages, the web interface language defines the used IODD language (currently EN and DE). The fallback language will always be English.

### Device variants

IODD files may apply for several device variants. You can select the correct device variant in this case over the dropdown menu. The selection affects the device image shown in the IODD information box. There is no functional impact of the selection.

In case only one device variant is included in the IODD file, the selection field is greyed out.

## Port control

Initially, the port power is disabled after startup of the device. The power can be enabled and disabled using the buttons on the port subpage of the web interface:




After enabling the port, the detected communication speed and IDs are read and displayed (IOL port mode). If vendor ID or device ID do not match with the IODD file used for port configuration, an error is shown and no communication to the device will be possible.

### Power on at startup

*Requires min SW 1.4.x*

Each IO-Link port can be configured to automatically switch its power on at Pinebox start via “Power on at startup”. This replaces the need to power ports on manually or via Node-RED after a reboot. The setting is saved immediately when the toggle is changed. The setting persists across reboots and is included in user configuration backup and restore. Power-on at startup is independent of the port mode setting.