# ADEC
## Technologies

# Camina

## Commissioning and Monitoring Interface with Network Access



The Camina is a hardened device that connects the ADEC RS-485 detector bus to another network, via serial or IP. As such, it can fulfil various tasks, depending on the software it is loaded with.

## Typical Applications

Typical applications include, but are not limited to:

- Traffic data concentrator and transmitter (outstation, edge device)
- Actuator for ADEC traffic data acquisition and processing solution (ADEC Cloud)
- Protocol converter to project-specific, serial or IP-based protocols
- Remote-accessible service tool for on-site diagnostics and trouble-shooting
- Mains-powered IoT Gateway for ADEC cloud

## Working principle

The Camina uses a Linux-based, industrial-grade hardware. Depending on the application, DIO expansion module (order number 11660) augment the functionality. When used in conjunction with the ADEC Cloud as actuator, the Camina requires permanent Internet connection. Typically, the second RJ45 port is used for local service chores. The Camina device has a Unique ID by which it is identified in the ADEC cloud, from where it can be configured and maintained.

## Mounting

The device must be mounted inside a cabinet, protected from the elements and adverse environmental conditions. Proper cabling must be used to ensure electrically flawless communication between the Camina and the traffic detectors on the site.

## Features

- **Data Concentrator**
  Gathers and stores traffic data from ADEC traffic detectors

- **Protocol Converter**
  Sends, or makes available, the traffic data in custom, project-specific manner

- **Two RJ45 Network Ports**
  For traffic data transmission or protocol conversion and local service access

- **Remote Access**
  Permits remote access via IP

- **Wide operating temperature range −20 to +55°C (−4 to +131ºF)**
  Optimal performance in all weather and climate conditions

- **Optional WiFi**
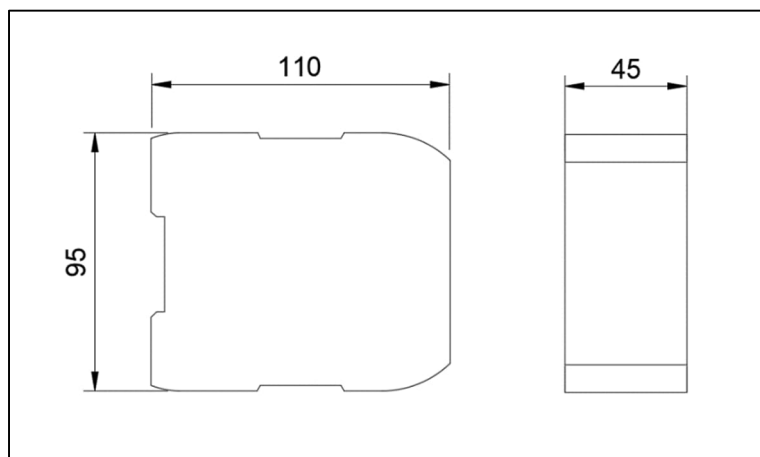  Secure Hotspot-access via PC or mobile device browser

## Typical Installation
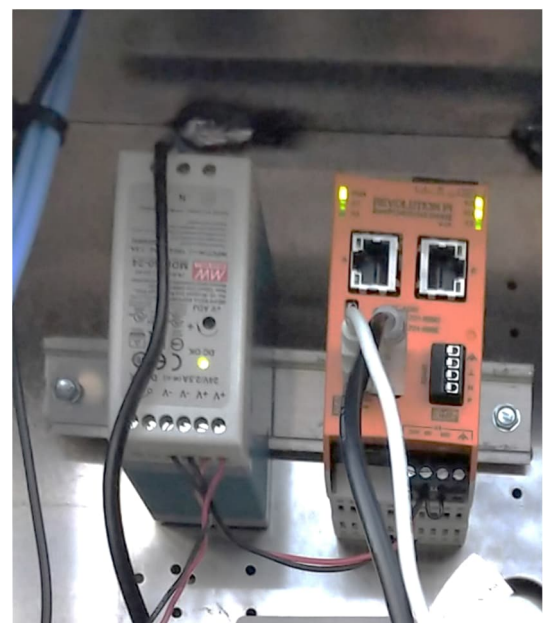
# Technical Specifications

| Electrical | |
|---|---|
| Supply Voltage | 12-24 VDC |
| Power Consumption* | typ. <0.2 A @ 24 VDC |
| Turn-on Time | typ. 60 s from power on |
| **Mechanical** | |
| Dimensions | see drawing (below) |
| Case Material | Polycarbonate |
| Weather Protection Enclosure | n/a |
| Weight | app. 240 g (½ lbs.) |
| **Network** | |
| LAN | 2 x 100 Mbps RJ45 |
| **IO** | |
| USB | 2 x USB 2.0, type A |
| Serial | 1 x RS-485 (galvanically isolated) |
| Digital input | 1 signal input, built-in |
| Digital output | 1 SPST relay output, 2 A max @ 30 V |
| Watchdog | Built-in hardware watchdog |
| **System** | |
| RTC | Real-time clock, maintains time for > 24 hrs of no power |
| Cooling | Passive cooling, fanless design |
| **Environmental** | |
| Operating temperature | -40° to 55°C (-40° to 131°F) |
| Humidity | 10% to 93%, non-condensing |

*not including max. combined 1 A draw from 2 USB-A ports*

# Accessories and Upgrades

| DIO Module |
|---|
| DIN-rail expansion module with 14 digital inputs and 14 digital outputs. Camina requires Internet access for this module to be able to work with the ADEC Cloud  |
| **Order Number 11660** |
| **Power Supply** |
| DIN-Rail power supply, converts AC from 90 – 264 volts to 24 volts DC for Camina and/or TDC detectors  |
| **Order Number 11651** |
| **Interface RS-485 & Software** |
| Additional RS-485 port can be installed using standard USB-RS485 interface. Requires software that operates the additional interface  |
| **Order Number: 12501** |

# Mechanical Dimensions



(all dimensions in mm)

**Important:**

Data is based on samples and believed to be representative.

Design and specification changes reserved without prior notice.

For more specific information on the products, their installation and application please refer to the installation manual or contact the manufacturer.

# Model Overview

● **Camina** (Order Number: **11650**)