

## CANsub (CANsub.2/CANsub.4): 2-4 x CAN Bus Interface (USB + Ethernet)



### General Features

- Compact CAN bus interface with USB and Ethernet connectivity, available with 2 or 4 galvanically isolated CAN FD channels (CANsub.2 / CANsub.4).
- Zero-install operation: power the device via USB, then enter the device URL in a browser to open the built-in webCAN app.
- Built-in color LCD display (160 x 80 px) shows the device URL and live CAN channel status.
- Open REST/WebSocket API for building custom apps, with plug & play integrations for e.g. Python and SavvyCAN.
- Ideal for CAN bus diagnostics, OEM development, field service, automation, sniffing and dashboards.
- Certified CE, FCC, IC; voltage transients tested to ISO 7637-2:2011 by TÜV SÜD.
- 100% free and open source software.
- Comes with a one-year warranty and free, high-quality support.
- Product is made in Denmark.

### CAN Bus Specifications

- 2-4 x CAN FD channels, galvanically isolated (CANsub.2: 2 channels; CANsub.4: 4 channels).
- Supports J1939, OBD2, CANopen, NMEA2000, CAN FD and other CAN-based protocols.
- Bit-rate configuration via auto-detection, or simple/advanced manual customization.
- Configurable hardware-based silent mode for passive bus monitoring.
- Configurable hardware ID filters per channel.
- Support for logging CAN error frames and remote frames (RTR).
- Configurable edge-based transmit lists ('jobs') with precise frame timing.

### Data Streaming Capabilities

- Streams CAN bus data in real time via USB or Ethernet.
- Send/receive data in parallel across all 2-4 CAN channels simultaneously.
- Device-side timestamping with 1 microsecond resolution.
- Supports 20,000+ frames per second.
- View, export and import trace data (up to 2 million frames) via the webCAN app.
- Load and assign DBC files for real-time signal decoding and plotting.
- Support for J1939 transport protocol, ISO-TP, and NMEA 2000 Fast Packets.

## Software & API Tools

- webCAN app runs directly on the device – no drivers or software installation required.
- webCAN supports bit-rate configuration, hardware filters, silent mode, transmit sequences (with optional DBC encoder), and real-time signal charts.
- Open REST API for device configuration and monitoring (OpenAPI compliant).
- Open WebSocket API for real-time transfer of raw CAN frames.
- Python API for automating data streaming and processing, including AI agent integrations.
- Compatible with third-party tools such as SavvyCAN and PlotJuggler.
- JS/TS libraries available for quickly building custom CANsub web apps.
- LLM-friendly documentation (TXT) for rapid development with AI tools.

## Interfaces, Connectivity & Security

- Configure and stream data via USB or Ethernet.
- Ethernet connectivity enables access via LAN, WiFi (via router), or remotely over the internet.
- Access multiple devices simultaneously using unique, bookmarked URLs.
- Secure remote access supported via VPN, including over LTE routers.
- All data communication is encrypted via HTTPS (TLS 1.2).
- Supports mDNS for easy device discovery on the network.

## Mechanical & Supply Specifications

- Compact aluminium enclosure: 75 x 67 x 20 mm (W x L x H, excluding flanges); weight: 90 grams.
- Powered via USB connector (+5V); optional PoE adapter available.
- Very low power consumption (<1 W).
- Built-in color LCD display (160 x 80 px) for device status.
- Connectors: CANsub.2 – 2 x DB9; CANsub.4 – 1 x DB25.
- Operating temperature range: -25°C to +70°C.
- IP40 rated enclosure.