DEWETRON'S SOLUTIONS FOR
DATA PROTOCOLS & REMOTE CONTROL

DEWETRON

OXYGEN supports robust data output protocols, including SCPI, XCP, EtherCAT, CAN and others for seamless test bed integration. Remote access and configuration can be achieved easily by using common tools and standardized interfaces.

DATA OUTPUT PROTOCOLS

DATA OUTPUT USING SCPI

OXYGEN's SCPI interface is the powerful tool for data transfer and remote control. The following data transfer possibilities are available when using SCPI (for remote control see below):
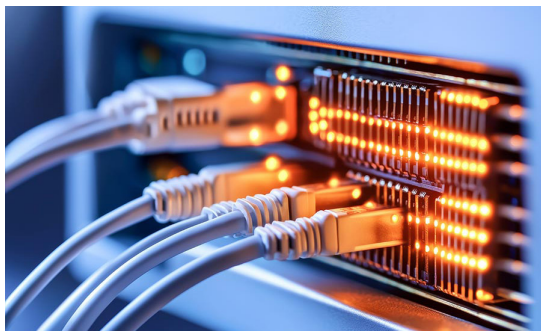
> Single value or buffered data fetching
> Data transfer rates up to 10 kS/s supported
> Different transfer formats available for efficient transfer and decoding


ETHERNET SENDER

The Ethernet Sender allows you to easily transmit measurement data via Ethernet UDP to one or multiple data sinks. An XML file for decoding the data on the receiver side is automatically generated and can be seamlessly imported by OXYGEN's Ethernet receiver. This powerful combination is perfect for efficiently distributing data to multiple clients for monitoring purposes.

> Maximum output rate: 100 S/s
> End-to-end or Broadcast supported
> Directly compatible with Ethernet receiver

XCP OUT

The CAN-OUT is not fast enough for your automotive test bed? Use XCP over Ethernet instead. With this option, the OXYGEN software acts as XCP-slave and serves measurement data to your test bed:

> ASAM standard with automatic *.a2l file generation
> Polling and DAQ-list support (up to 10 kS/s) for live data transfer
> Measurement control and software synchronization
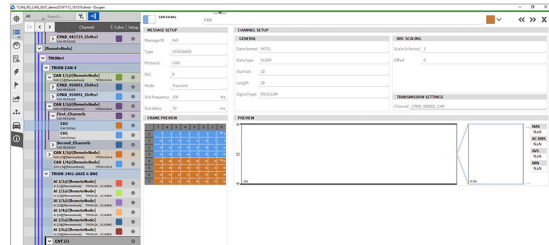> Compatible with Vector CANape and ETAS INCA
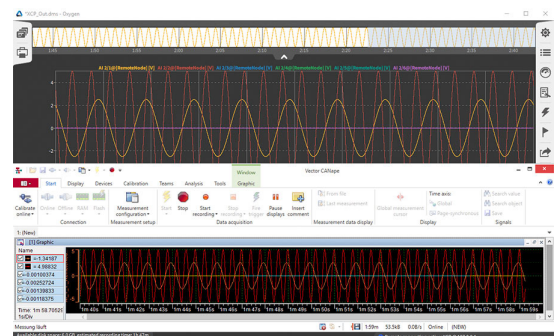
⑥ REASONS WHY CHOOSE DEWETRON

1. **Unified hardware architecture:** One hardware architecture and file format for different applications and test scenarios to simplify your setup.

2. **Extended warranty:** Enjoy our 5-year warranty, ensuring long-term reliability.

3. **Accredited calibration services:** Benefit from ISO 17025-accredited calibration and adjustment services that guarantee accuracy and compliance.

4. **Certified quality management:** Our ISO-certified quality management upholds the highest standards across all business processes.

5. **Straightforward software licensing:** Our simple software license policy ensures ease of use and flexibility.

6. **Dedicated local support:** Count on our highly responsive service team for personalized support and assistance.

ETHERCAT

Does your test bed support only EtherCAT for data and control? No problem! Our TRION-EtherCAT hardware meets your needs:

> Transfer up to 100 measurement channels via EtherCAT
> Up to 1000 S/s update rate
> Typ I/O delay: 200 ms
> Transfer absolute timestamps for post-synchronization
> Automatic *.esi file generation

CAN OUT

If you need acquired data on the CAN bus, the CAN-transmit function makes it easy to serve almost any OXYGEN channel cyclically on the CAN bus.

> Supports TRION-CAN and Vector CAN
> Simultaneously send and receive on the same bus
> Selectable transmission interval for each CAN message
> Adjust transmission delay for quality or responsiveness
> Automatic *.dbc file generation for decoding

DATA STREAM

With the data stream feature, you can transfer and process data in your own application. Stream raw data and calculated data, like power or statistics, via TCP/IP at high speed to one or more applications.

> Stream data via TCP/IP at full sample rate.
> Configure streams via SCPI interface for full remote control.
> Supports multiple streams with individually configurable channels.
> Example stream decoders available in C and Python.
> Continuous and triggered streaming supported.
> Can be used during acquisition, recording and even during post processing for transferring data from a *.dmd file.


REMOTE CONTROL TOOLS

REMOTE CONTROL USING SCPI

OXYGEN's SCPI interface is the powerful tool for data transfer and remote control. The following remote control possibilities are available when using SCPI:

> Acquisition and recording control
> Full channel list access to read and configure channel settings
> Editing header information
> Trigger control
> Screenshot initiation for reporting purpose
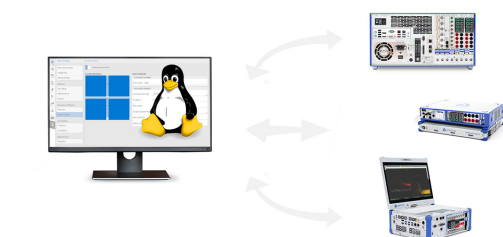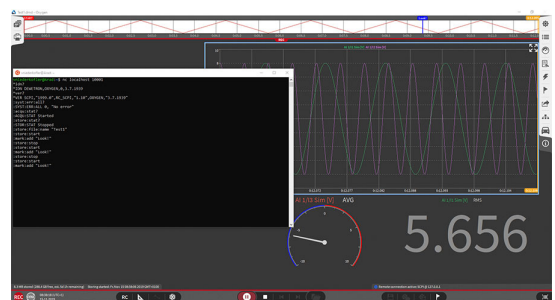
REMOTE ACCESS

As DEWETRON data acquisition systems are either Windows or Linux based, standard remote access tools can be used to access and configure your system in case it is accessible via network or VPN.