



WT-CAN Adapter

WT5000, WT3000E and WT1800E Precision Power Analyzers

For automotive and industrial test benches, smooth and efficient measurement data transfer to different systems is particularly important. With the new WT-CAN adapter, users can easily convert measurement data from Yokogawa's Precision Power Analyzers into the CAN 2.0A/CAN 2.0B protocol.



Automotive test bench support

The WT-CAN Adapter supports the integration of WT5000, WT3000E and WT1800E Precision Power Analyzers in an automotive or industrial test bench environment, allowing customers to log Power Measurement data simultaneously with data derived from in-vehicle sensors.

- Supports WT5000, WT1800E and WT3000E Precision Power Analyzers
- CAN protocols: CAN2.0A and 2.0B
- Configuration software included (WT-CAN setting tool)
- Read and convert up to 1000 parameters (@50ms, 300 parameters)
- Sends setting info from the CAN bus to WT series (200ms interval)
- Supports WT5000's 10ms update rate (50 parameters)
- Galvanic isolation up to 2500 Vrms

Parameterization without programming knowledge

The biggest advantage of the WT-CAN adapter is quick and easy parameterization. Even without any programming experience it's easy to set up the Ethernet to CAN conversion. The included configuration software (WT-CAN setting tool) queries the required measurement data from the Precision Power Analyzer, after which the conversion of the measurement data is performed by the WT-CAN Adapter.

The configuration software takes over the complete programming of the CAN adapter, with test professionals permitted to drag and drop the required measurement parameters. (fig. 1.)

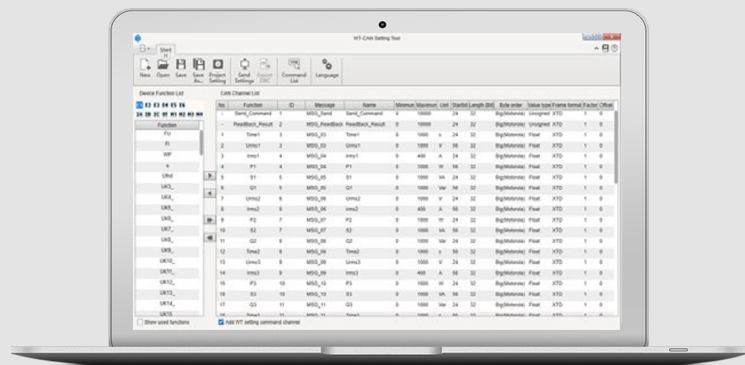


fig. 1: WT-CAN Setting Tool for quick and easy Parameterization of the CAN adapter, even without programming knowledge.

Select a wealth of measurement parameters

It's possible to choose from all voltages, currents, powers, power factors and frequencies, as well as measurement data resulting from the instrument's harmonic analysis. The measured values of up to four torque/speed sensors (connected to the WT5000), the total values of set wiring systems, along with calculated efficiencies and up to 20 calculations defined by the user (User-Defined Functions), can be selected and transmitted via the CAN bus for each measurement interval.

Easy configuration thanks to DBC file

The configurations made in the configuration software can be sent to the WT-CAN adapter via an Ethernet connection. At the same time, the software enables the generation of a CAN DBC file (CAN database), which is a text file that contains information for decoding raw CAN bus data to 'physical values'. It is possible to load this DBC file to the CAN system of the test bench, making it unnecessary to configure the CAN channels manually. The standardized DBC file includes up to 1000 measurement parameters from the Precision Power Analyzer that can be queried and converted at each time interval.

Support fast measurement intervals

The WT-CAN Adapter supports the fastest measurement intervals of the power analyzers: 10 ms (WT5000) and 50 ms (WT3000E, WT1800E). As such, the adapter can set transmission rates from 10 kbit/s up to 1 Mbit/s.

Bi-directional communication for test benches

In addition to sending measurement data from the Power Analyzer to the CAN bus network, the WT-CAN adapter can also receive CAN commands containing setting information and send these to the power analyzer. This capability allows important settings, such as changing the voltage and current ranges on the power analyzer, to be completed automatically via the CAN system. As a result, implementation of the WT-CAN adapter in existing test benches is also very easy.

Galvanic Isolation

As a further benefit, the WT-CAN adapter protects networks against destructive energy by offering galvanic decoupling on the CAN side (using optocouplers) up to a voltage of 2500 Vrms.

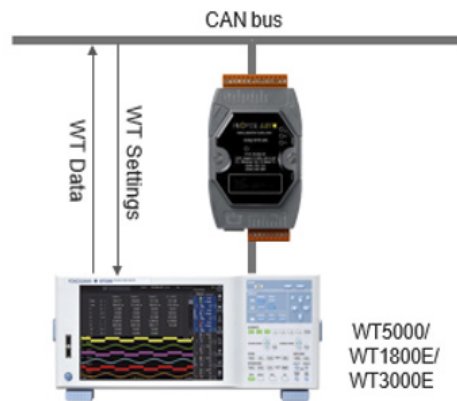


Fig. 2: Overview of CAN communication with WT power analyzers

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