FOERSTER

TCL MULTIPLEXER

Flexible multi-sensor testing with just one test channel



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Up to four sensors. One test channel. Maximum flexibility. The TCL MULTIPLEXER expands the TCL product family with a flexible solution for testing applications involving multiple sensors. Up to four sensors can be operated sequentially via a single test channel. This allows different test positions or sensors to be integrated into the testing process one after another, without requiring a separate test channel for each sensor. The system architecture can therefore be tailored specifically to the respective testing application.

The MULTIPLEXER handles the targeted switching between the connected sensors. Hardware-based signal routing establishes a direct connection between the active sensor and the evaluation unit for each measurement. A status LED on the MULTIPLEXER provides an immediate indication of which sensor is currently selected.

Integration into the TCL system is straightforward: The MULTIPLEXER is connected to the TCL unit via a single sensor cable and is powered directly by the system. Control is handled via the TCL system software, where the corresponding MULTIPLEXER channel can be assigned to each test definition. This ensures that the required sensor is activated according to the respective testing task.

The architecture also remains flexible as testing requirements grow. Up to four TCL units can be connected to one TCL Controller, with each TCL unit supporting one TCL MULTIPLEXER and up to four sensors. This allows a total of up to 16 sensors to be integrated into a single system. The four TCL test channels operate in parallel, while each channel can switch sequentially between up to four sensors.

The TCL MULTIPLEXER therefore adds even greater flexibility to the modular TCL system architecture for multi-sensor applications – from compact testing tasks with just a few sensors to more extensive testing configurations.

YOUR ADVANTAGES AT A GLANCE

Multi-sensor operation: Control up to four sensors sequentially via a single test channel.

Flexible scalability: Connect up to four TCL units to one TCL Controller, each with one MULTIPLEXER and up to four sensors – enabling up to 16 sensors within a single system.

Direct signal transmission: Hardware-based signal routing establishes a direct connection between the active sensor and the evaluation unit.

Easy integration: Connect via just one sensor cable, with power supplied directly by the TCL system.

Flexible software control: Assign the required multiplexer channel directly to the respective test definition in the system software.

Active sensor at a glance: A status LED directly on the multiplexer indicates which sensor is currently selected.

TECHNICAL INFORMATION

SENSOR CONNECTIONS:	Up to 4
OPERATING MODE:	Sequential
DIMENSIONS:	185 × 109 × 35 mm (L × W × H)
OPERATING TEMPERATURE:	+5 to +40 °C
STORAGE TEMPERATURE:	+10 to +50 °C
PROTECTION RATING:	IP40
POWER SUPPLY:	Via the TCL system
CONFIGURATION:	Via the TCL system software

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