

MULTIPLEXER MX16

AUTOMATED GAS SAMPLING

The UGT MX16 Multiplexer enables the automated routing of gas samples from multiple sources to a connected gas analyzer. A central multi-position valve controls the gas flow and switches between the connected gas sources or gas paths according to the selected operating mode.

The 16-port versions are available in three variants for different gas routing and sampling requirements:

- **MX16-FT**: Standard version
- **MX16-CF**: Continuous-flow configuration with 13 sample ports and 3 reference ports, including flow control and a diaphragm pump
- **MX16-CL**: Closed-Loop Design

For large-scale measurement tasks, multiple multiplexers can be operated in parallel*. Additional customizations are available upon request.

KEY FEATURES

- 16-port versions for the automated analysis of multiple gas sources
- Central multi-position valve for automated gas routing
- Identical line lengths for all gas sources, ensuring identical flow paths within the multiplexer
- Low dead volume and fast response times
- 1/8" gas connections for inlets and outlets
- Flexible configuration of measurement sequences via UGT control software
- Storage of measurement data as CSV files
- Compatible with any gas analyzer
- Up to five multiplexers can be operated in parallel*
- Robust, weatherproof enclosure for use under demanding environmental conditions
- External power supply (110–230 V)

* During parallel operation, one position on each multiplexer remains closed and serves as a parking position. With up to five multiplexers operated in parallel, up to 75 sampling positions can therefore be monitored automatically.



MX16-CF Front View



MX16-CF Back View

TECHNICAL DATA

PARAMETERS	SPECIFICATIONS		
Multiplexer	MX16-FT	MX16-CF	MX16-CL
GAS LINES AND CONNECTIONS			
Number of sampling ports	16	13 (flow-through)	16
Number of reference inlets	–	3 (dead end)	–
Number of outlets	–	1	16
Connection to a gas analyzer	1	1	1
Operating mode	Sampling lines without continuous flow	Sampling lines with continuous flow	Closed-loop gas path with recirculation without continuous flow
Gas connections	1/8"		
VALVE / FLOW			
Type	16-port Multi-Position Valve		
Max. pressure	200 psi gas		
Fittings	1/8"; 1 mm bore		
Flow meter	–	13 + 1	–
CONNECTIONS FOR UGT GAS MEASURING CHAMBERS			
Connections (optional)	16 × 8-pin		
Functions (optional)	Power supply, control signals, and data lines, including sensors		
MECHANICAL SPECIFICATIONS			
Dimensions	upon request		
CONTROL / DATA			
System requirements	At least Windows 10; iOS and Linux are optional		
Software	inclusive		
Measurement procedure	configurable		
Data export	CSV (switching times and error log)		
Gas analyzer	regardless of the gas analyzer used		
ELECTRICAL SPECIFICATIONS			
Input power supply	24 V DC, 3.3 A (depending on model) (incl. power supply: 110–240 V; 50/60 Hz)		
INTERFACE			
Communication with the control computer	RS-485 via USB		
APPLICATION AREA			
Operating temperature	0 ... 50 °C		