

SP5 M

Fixed site sampler including measuring rack, in stainless steel housing with thermostatic control for automatic sample extraction according to the vacuum principle or peristaltic pump principle. Mains operation 230V/50Hz.

Type	Fixed site sampler
Housing	Double-walled stainless steel (material 1.4301/ SS304) / PS / PC (GF10) with 40 mm insulation. Housing separated in sample compartment and control compartment, each with lockable door. Upper door with plexiglass window. Protective top made of Styrosun which can be opened for connection and maintenance works. Option: material 1.4571/ SS316Ti; SS304 EPOXY-coated; SS316Ti EPOXY-coated
Measuring rack	For installation of 4 measuring transducers, size 96 x 96 (e.g. WTW – QuadroLine pH 296, conductivity Lf 296, TE 296, OCI 296). Other sizes and measurements are possible. Thanks to their own power supply the measuring units can be operated independently from the sampler. The sensors can be suspended directly into the flume by means of armatures or chains (diverse fixing armatures are available as option).
Thermostatic control	Self-contained, controlled cooling / heating with 4 settings, no-frost. independent of the programmable controller, Temperature in sample compartment: 4°C (adjustable from 0,0-9,9°C)
Control	Microprocessor control, Sleep-Mode (<5mA), power supply 8-16 V foil keyboard (with keys 0-9, ESC, ENT, cursor), graphical display (128*64 Pixel), back lit
Data logger	3000 entries, non-volatile data memory; storage of sampling and malfunction data like sample extractions, bottle changes, messages, external signals. optional with WEB-board 100 MB (2 Year ring memory-FIFO at 1 min interval)
Programming	12 freely programmable user programs, with function to link programs.
Program start options	- IMMEDIATELY; - DATE/TIME - WEEKDAY/TIME; - BY AN EXTERNAL SIGNAL
Program End/Stop options	End of sampling program - AFTER 1 RUN - AFTER X RUNS - CONTINUOUS OPERATION - DATE/TIME
Pause mode	Interruption of program run at any time
Overfilling protection	Adjustable from 1–999 samples/bottle
Interval setting	1 min. to 99 h 59 min. in steps of 1 minute
Pulse setting	1 to 9999 pulses/sample
Manual sample extraction	Possible at any time without interrupting the current program run
Program protection	Up to 5 years after voltage loss
Interface	Mini-USB, RS 232 optional: Ethernet RJ45, SDI-12
Communication (option)	Optional: Modbus, Profibus DP Connection or LAN / WLAN / GPRS-UMTS optional: 1. Connection via USB and PC • maxxwareConnect® has to be installed on the PC • Connection to the sampler via USB/MiniUSB cable • remote control of the sampler • visualization of downloaded data • download and saving of data as PDF, CSV or XLSX Format

	<ul style="list-style-type: none"> • print-out of data directly as PDF Format • backup of all preprogramed programs from the sampler • setting and saving of programs in offline mode. Upload in online mode • Read out, changing, saving or upload of all sampler programs (1-12) • recovery of saved programs. <p>2. LAN Modul RJ45 via TCP/IP and IE-Browser</p> <ul style="list-style-type: none"> • ARM9-SoC • 32MB RAM • 100 MB Data Memory ((2 Year ring memory-FIFO at 1 min interval) • Linux OS • TCP/IP (RJ45) • recording of all CPU Data (like data of sampling cycle, bottle report, error log, temperature etc.) • visualization via Web interface • Data-export (PDF, CSV, XLS) • E-Mail error messaging <p><u>or alternatively</u></p> <p>3. LAN Modul RJ45 + GPRS/UMTS Router</p> <ul style="list-style-type: none"> • ARM9-SoC • 32MB RAM • 100 MB Data Memory ((2 Year ring memory-FIFO at 1 min interval) • Linux OS • TCP/IP (RJ45) • recording of all CPU Data (like data of sampling cycle, bottle report, error log, temperature etc.) • visualization via Web interface • Data-export (PDF, CSV, XLS) • E-Mail error messaging <p>additionally</p> <ul style="list-style-type: none"> + Fully integrated Router (industrial standard) + UMTS / GPRS + SIM card holder + E-Mail error messaging + antenna
Languages	Multi-language, selectable
Signal inputs	<ul style="list-style-type: none"> • 2 x analogue: 0/4-20 mA, • 8 x digital (flow, event, 1 inputs can be programmed freely) <p>option: expandable with 4x digital, 3 inputs can be programmed freely, and 8x analogue 0- 20 mA or 0-10 V, Impulslength 60ms, switching level 7-24 V, max. working resistance 500 Ohm, max. length of signalcable 30 m</p>
Signal outputs / status messages	<ul style="list-style-type: none"> • 8 digital outputs, <p>1x of them as collective malfunction message (Relay optional) option: expandable with 8 digital, 5 are freely programmable (in total 6 messages)</p>
Sampling method	<ul style="list-style-type: none"> -Vacuum system 20-350 ml Option: vacuum system 20-500 ml Option: vacuum VAR flow-proportional system 5-250 ml Option: bypass system 20-250 ml Option: peristaltic pump 10-10.000 ml (flow-proportional)
Single sample volume accuracy	<ul style="list-style-type: none"> Vacuum system: < 2,5 % or +/- 3 ml Peristaltic pump: +/- 5 % or +/- 5 ml
Suction height	Max. 7,5 m (at 1013hPa and stagnant medium), optional 8,5 m or 15 m (Power Booster)
Pumping speed	>0,5 m/s at suction height up to 7,8 m (at 1013h Pa); pump capacity can be adjusted electronically
Suction hose	PVC, L=7,5 m, ID=12 mm. Max. hose length 30 m
Sampling modes	Time-related, flow-dependent, event-related, manual sample extraction, Option: flow-proportional (for Peristaltic Pump as standard)

Bottle variants	Plastic 1 x 25 L, 1 x 50 L, 2 x 10 L 4 x 6,0 L, 4 x 10 L, 4 x 14 L, 12 x 2,9 L, 24 x 1,0 L Glass 12 x 2,0 L 24 x 1,0 L
Overall dimensions	1.470 (2.070*) x 690 x 645 mm *) with opened top
Weight	Approx. 110 kg with composite container, higher weight when using several bottles and/or glass bottles
Power supply	230 V / 115 V /AC
Power requirement	Approx. 350VA (with cooling)
Ambient temperature	-20 – 43°C
Sample temperature	0 – 40°C
Standards	CE Sampling according to ISO 5667-10, EN16479
Wetted materials	PC, PVC, Silicone, PS, PE, EPDM (optional: metering vessel glass Duran50, sinker weight SS304)

Make: **MAXX**

Type: **SP5 M**

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