

## MAXX TP5 C portable sampler as compact device with integrated distributor and 24 bottles for fully automatic sampling according to the <u>vacuum or peristaltic-pump principle</u>. Battery—operated 12V/10Ah.

| Туре                        | Portable sampler   |
|-----------------------------|--|
| Housing                     | PE / PC (GF10)   |
| Thermostatic control        | Insulated lower part (sample compartment)<br>(insulation thickness 40 mm)<br>Option: freezer packs (200x10x8 mm)<br>Option: compressor cooling (12V/115V/230V)   |
| Control                     | Microprocessor control, Sleep-Mode (<5mA), power supply 8-16 V<br>foil keyboard (with keys 0-9, ESC, ENT, cursor), graphical display (128*64 Pixel),<br>back lit   |
| Data logger                 | 3000 entries, non-volatile data memory;<br>storage of sampling and malfunction data like sample extractions, bottle changes,<br>messages, external signals.<br>optional with WEB-board 100 MB<br>(2 Year ring memory-FIFO at 1 min interval)   |
| Programming                 | 12 freely programmable user programs, with function to link programs.  |
| Program start options       | - IMMEDIATELY;<br>- DATE/TIME<br>- WEEKDAY/TIME;<br>- BY AN EXTERNAL SIGNAL  |
| Program End/Stop<br>options | End of sampling program<br>- AFTER 1 RUN<br>- AFTER X RUNS<br>- CONTINUOUS OPERATION<br>- DATE/TIME  |
| Pause mode                  | Interruption of program run at any time  |
| Overfilling protection      | Adjustable from 1–999 samples/bottles  |
| 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<br>optional: Ethernet RJ45, SDI-12  |
| Communication<br>(option)   | <ul> <li>LAN / WLAN / GPRS-UMTS optional: <ol> <li>Connection via USB and PC</li> <li>maxxwareConnect® has to be installed on the PC</li> <li>Connection to the sampler via USB/MiniUSB cable</li> <li>remote control of the sampler</li> <li>visualization of downloaded data</li> <li>download and saving of data as PDF, CSV or XLSX Format</li> <li>print-out of data directly as PDF Format</li> <li>backup of all preprogramed programs from the sampler</li> <li>setting and saving of programs in offline mode. Upload in online mode</li> <li>Read out, changing, saving or upload of all sampler programs (1-12)</li> </ol> </li> <li>2. LAN Modul RJ45 via TCP/IP and IE-Browser</li> </ul> |
|                             | ARM9-SoC   |



|                                     | <ul> <li>32MB RAM</li> <li>100 MB Data Memory ((2 Year ring memory-FIFO at 1 min interval)</li> <li>Linux OS</li> <li>TCP/IP (RJ45)</li> <li>recording of all CPU Data (like data of sampling cycle, bottle report, error log, temperature etc.)</li> <li>visualization via Web interface</li> <li>Data-export (PDF, CSV, XLS)</li> <li>E-Mail error messaging</li> <li>or alternatively</li> <li>3. LAN Modul RJ45 + GPRS/UMTS Router</li> <li>ARM9-SoC</li> <li>32MB RAM</li> <li>100 MB Data Memory ((2 Year ring memory-FIFO at 1 min interval)</li> <li>Linux OS</li> <li>TCP/IP (RJ45)</li> <li>recording of all CPU Data (like data of sampling cycle, bottle report, error log, temperature etc.)</li> <li>visualization via Web interface</li> <li>Data-export (PDF, CSV, XLS)</li> <li>E-Mail error messaging</li> </ul> |
|-------------------------------------|--|
|                                     | <ul> <li>Fully integrated Router (industrial standard)</li> <li>UMTS / GPRS</li> <li>SIM card holder</li> <li>E-Mail error messaging</li> <li>antenna</li> </ul>   |
| Languages                           | Multi-language, selectable   |
| Signal inputs                       | <ul> <li>2 x analogue: 0/4-20 mA,</li> <li>8 x digital (flow, event, 1 inputs can be programmed freely)<br/>option: expandable with 4x digital, 3 inputs can be programmed freely, and 8x<br/>analogue 0- 20 mA or 0-10 V, ImpulsIength 60ms, switching level 7-24 V,<br/>max. working restistance 500 Ohm, max. length of signalcable 30 m</li> </ul>   |
| Signal outputs / status<br>messages | <ul> <li>8 digital outputs,</li> <li>1x of them as collective malfunction message (Relay optional)</li> <li>option: expandable with 8 digital, 5 are freely programmable (in total 6 messages)</li> </ul>  |
| Sampling method                     | -Vacuum system 20-350 ml<br>-Vacuum VAR (variable) system 5-250 ml<br>Option: peristaltic pump 10-10.000 ml (flow-proportional)  |
| Single sample volume accuracy       | Vacuum system: < 2,5 % or +/- 3 ml<br>Peristaltic pump: +- 5 % or +/- 5 ml   |
| Suction height                      | Max. 6,5 m (at 1013h Pa)<br>optional 8,5 m or 15 m (Power Booster)   |
| Pumping speed                       | >0,5 m/s at suction height up to 5 m (at 1013h Pa); pump capacity can be adjusted electronically   |
| Suction hose                        | PVC, L=5 m, ID=10 mm max. hose length 30 m   |



| Sampling modes                           | Time-related, flow-dependent, event- related and manual sample extraction.<br>Option: flow-proportional (for Peristaltic Pump as standard)   |
|--|--|
| Bottle variants                          | 1 x 10 L PE<br>1 x 25 L PE<br>2 x 13 L PE<br>4 x 5 L PE<br>16 x 1 L PE incl. freezer packs<br>24 x 1 L PE (standard version)   |
| Overall dimensions                       | (Hxwxd)<br>787 x 510 x 468 mm /Insulating box passive<br>1028 x 550 x 468 mm / Insulating box active (with compressor cooling)   |
| Weight                                   | Approx. 25 kg 24x1 L - Isobox with passive cooling<br>Approx. 40 kg 24x1L - Isobox with compressor cooling (device incl. battery,<br>empty bottles but no suction hose)  |
| Power supply                             | Sampler:<br>12 V/ 10 Ah lead storage battery (maintenance-free, leak proof);<br>115V or 230V operation by means of battery charger in buffer mode. Range 11-14V;<br>power consumption max. 30 W<br>Cooling Box: 230V 50 Hz (115V by request) or 12V battery (solar battery with at<br>least 90 Ah)                         |
| Power requirement /<br>number of samples | Sampler:<br>Up to 2000 sample extractions per battery charge, according to ambient conditions.<br>Cooling Box:<br>Power requirement with option "active cooling" approx according to ambient<br>conditions. Aprox 50W.<br>(with 90 Ah battery, 20°C ambient, sampling 3x/h = running time of cooling system<br>aprox. 49h) |
| Ambient temperature                      | 0 – 45° C  |
| Sample temperature                       | 0 – 40° C  |
| Standards                                | CE Sampling according to ISO 5667-10, EN16479  |
| Wetted materials                         | PC, PVC, Silicone, PS, PE  |
| Make:                                    | MAXX   |
| Туре:                                    | TP5 C  |
| Manufacturer:                            | MAXX Mess- und Probenahmetechnik GmbH,<br>Hechinger Straße 41, D-72414 Rangendingen<br>Phone +49(0)7471-98481 0 Fax +49(0)7471-98481 44<br>e-mail: <u>info@maxx-gmbh.com</u><br>internet www.maxx-gmbh.com   |

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Subject to technical changes. \*) Patent No. DE 19726550A1, DE 19726549A1 and VAR (variable) unit DE 10008623.3