

GEMTP

TRUE POWER MODULE FOR TOOL AND PROCESS MONITORING

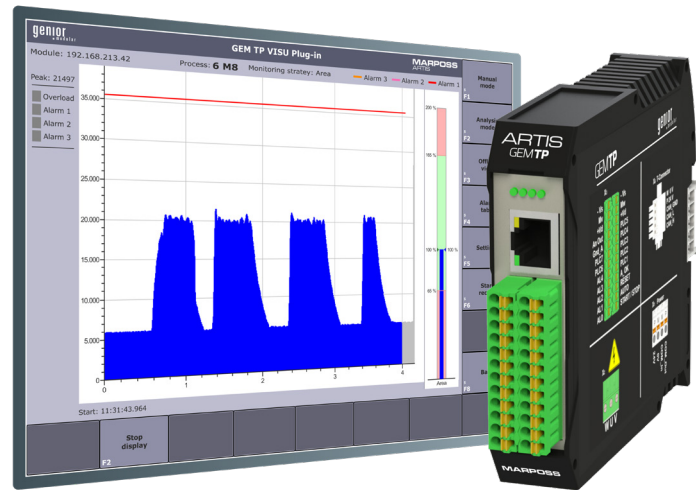
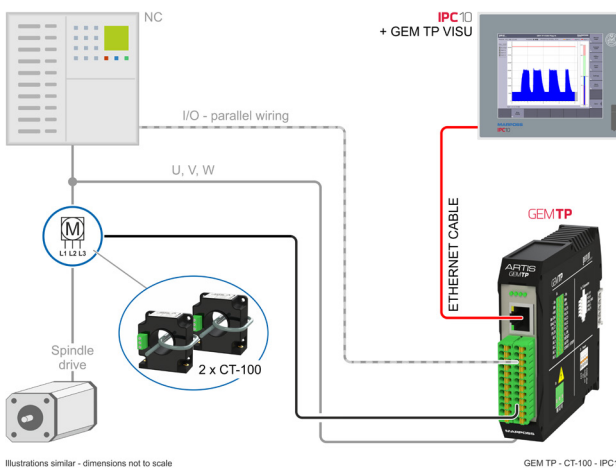


Illustration similar

Application example

Stand-alone operation

As a stand-alone module, GEMTP is an ideal solution for detecting process anomalies during metal cutting in machine tools. The application example below shows a GEMTP module with GEM TP VISU software (here via IPC10) and two CT-100 Hall sensors (order separately).



Illustrations similar - dimensions not to scale

For all technical details, please refer to the data sheets of the different components.

Integrated application

As part of the GENIOR MODULAR product family, GEMTP can also be connected to the GEMCPU and thus becomes part of the high-end GENIOR MODULAR system. In this case, the GEMCPU uses the measurement signal of GEMTP additionally for automatic monitoring strategies.

Properties

- Single channel system for drive monitoring
- Tool condition monitoring (breakage, missing, wear)
- Available for 127 different cycles
- Connection via I/O signals to all machine controls possible
- Simple installation in the control cabinet
- MultiView capable (parallel operation of several modules at one visualization)

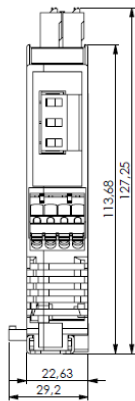
Benefits

- Avoidance of damage to workpieces, e.g. due to problems in the machining process
- Adaptable to different cutting processes thanks to different monitoring strategies (Static, Dynamic, Area)
- Comparing process curves for analysis purposes
- Event data recording (blackbox)
- External data processing thanks to manual or automatic data export in csv-format for Industry 4.0 applications

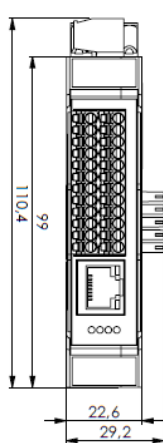
Article number

- GEMTP+ Monitoring Module * (see page 2) 0830Z910304
- GEMTP Monitoring Module 0830ZA00302
- order separately:
 - GEM TP VISU software for Windows PCs
 - IPC for visualization
 - Compatible Hallsensors:
 - CT-100, LA205S, LA305S

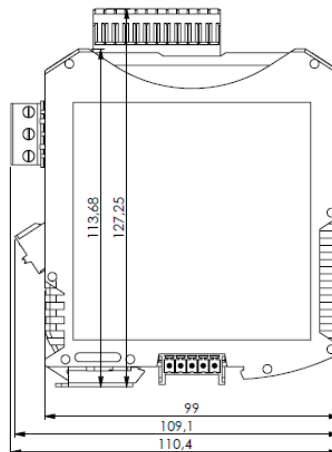
Front view



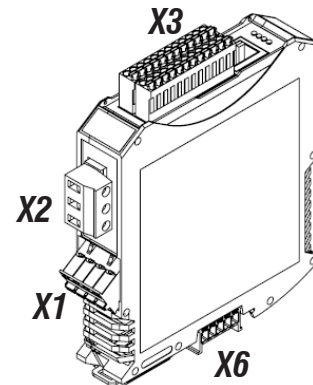
Top view



View from the left side



Perspective view



GENERAL DATA	
DIMENSIONS	see drawing
WEIGHT	0.138 kg
MATERIAL	Polyamide PA 6.6
STORAGE TEMPERATURE	0 °C... +70 °C
OPERATING TEMPERATURE	+5 °C... +50 °C
UL-CALSSIFICATION	VO (UL94)
DEGREE OF PROTECTION	IP30
ATMOSPHERIC RELATIVE HUMIDITY	max. 2 months, no condensation
STORAGE OPERATION	< 95 % < 85 % and 85 % ≤ RH < 95 %
INSTALLATION	DIN EN 60715 standard mounting rail
CONTACTING	Spring terminals, Screw terminals

MEASURING	
SAMPLING RATE	20 kHz
RESOLUTION	16 Bit
VIBRATION LOAD	
TRANSPORT	ISTA2
OP. TEST	(10...55) / 0.15 / (10...55) / 0.35
FC (2G MAX.)	25 kHz

REQUIREMENTS FOR VISUALIZATION	
	Microsoft Windows® as of WIN XP SP3 Siemens 840D as of V 04.05 (PCU/TCU)

MIN. RAM	512 MB
MIN. CLOCK FREQUENCY	600 MHz
MOUSE-/TOUCHSCREEN	recommended

CONNECTIONS	
CONNECTION X1	24 V DC ±20 %, 300 mA SELV type acc. to EN 60950-1 Cable cross section 0.2 ... 2,5 mm ²
CONNECTION X2 INPUT/DRIVE POWER	Cable cross section 0.25 ... 3 mm ² 500 V AC phase-phase CAT II
CONNECTION X3	Cable cross section 0.2 ... 1.5 mm ²
SENSOR CONNECTION	Measurement connection
ANALOG OUTPUT * (GEMTP+ ONLY)	0 ... 10 V
INPUT-/OUTPUT SIGNALS	10 input signals, 6 output signals
INPUTS	Sink-/source operation selectable
1-SIGNAL SOURCE	8 V ... 24 V / 5 mA
0-SIGNAL SOURCE	0 V ... 7 V / 5 mA
1-SIGNAL SINK	0 V ... 19 V / 5 mA
0-SIGNAL SINK	20 V ... 24 V / 5mA
OUTPUTS	
1-SIGNAL SOURCE	24 V typical, max. 100 mA
0-SIGNAL SOURCE	open
1-SIGNAL SINK	0 V ... 1 V
0-SIGNAL SINK	open
ETHERNET PORT	10/100 Mbit
CONNECTION X6	CAN bus and 24 V DC
CONFORMITY	CE, UKCA



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For a full list of address locations, please consult the Marposs official website

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