

GEMGP

GENERAL PURPOSE MONITORING MODULE

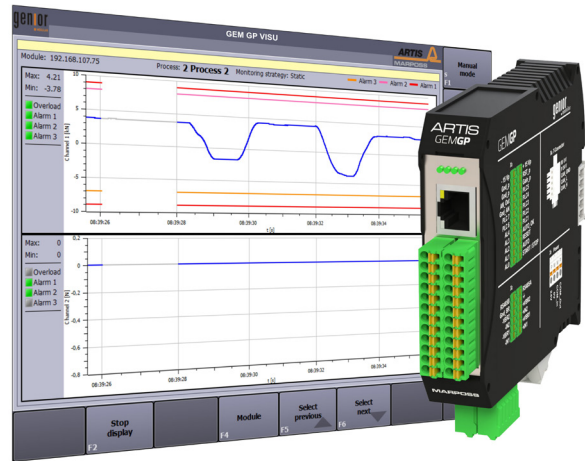
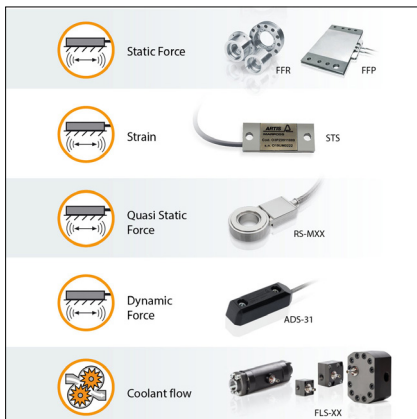


Illustration similar

Stand-alone application

As a stand-alone module GEMGP is an ideal solution for detecting process anomalies during metal cutting in machine tools. Different sensor types can be connected to the module, such as static, quasi static or dynamic force sensors, strain sensors or sensors with 0 - 10 V output* (e.g. coolant flow sensors).



For all technical details, please refer to individual sensor data sheets.

Properties

- Connectable to 2 sensor for force and strain monitoring, common start signal
- Different monitoring strategies (Static, Dynamic, Area)
- Tool condition monitoring (breakage, wear, missing)
- 127 different cycles available
- Connection to all machine controls possible via digital I/Os
- Simple installation in the control cabinet
- MultiView capable (parallel operation of several modules at one visualization)

ARTICLE NUMBERS

0830Z915004	GEMGP + Monitoring module* (see page 2)
0830Z915002	GEMGP Monitoring module
OCMZ0175021	GEM GP VISU Software 75.2.4

COMPATIBLE SENSORS

	Strain gauge bridge sensors
	Piezo resistive sensors
ANALOG INPUT	General analog input ± 10 V

GENERAL DATA	
DIMENSIONS	see drawing
STANDARD IP ADDRESS	192.168.214.92
WEIGHT	138 g
MATERIAL	Polyamide PA 6.6
STORAGE TEMPERATURE	-20 °C... +60 °C
OPERATING TEMPERATURE	+5 °C... +55 °C
UL-CLASSIFICATION	VO (UL94)
DEGREE OF PROTECTION	IP30
ATMOSPH. REL. HUMIDITY STORAGE	max. 2 months, no condensation
OPERATION	< 95 % < 85 % and 85 % ≤ RH < 95 %
INSTALLATION	DIN EN 60715 standard rail
CONTACTING	Spring terminal, screw terminal

CONNECTIONS	
CABLE CROSS SECTION	0.2...1.5 mm ²
ETHERNET PORT	10/100 Mbit
ANALOG OUTPUT* FOR GEMGP+ ONLY	0...10 V
CONNECTION X1	24 V DC ±20 %, 300 mA SELV type acc. to EN 60950-1 Sink-/source operation selectable
CONNECTION X2	Sensor connection for 2 full-bridge strain gauge sensors
SUPPLY MEASURING BRIDGE	5 V / max. 42 mA
BRIDGE RESISTANCE	>120 Ω
CONNECTION X3	
INPUT/OUTPUT SIGNALS	10 digital input signals, 6 output signals 2 outputs: power supply ±15 V, ±180 mA
INPUTS	
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 typ., max. 100 mA
0-SIGNAL SOURCE	open
1-SIGNAL SINK	0 V ... 1 V
0-SIGNAL SINK	open
CONNECTION X6	CAN bus, 24 VDC

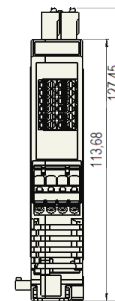
MEASURING	
SAMPLING RATE	10 kHz
RESOLUTION	16 bit

VIBRATION LOAD	
TRANSPORT	ISTA 1
OP. TEST FC <i>2g max.connection</i>	(10 ... 55) / 0.15 / (10 ... 55) / 0.35

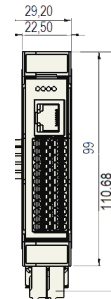
SOFTWARE REQUIREMENTS VISUALIZATION	
OPERATING SYSTEM	<ul style="list-style-type: none"> Microsoft Windows® as of WIN XP SP3 Siemens 840D as of V 04.05. (PCU/TCU)
MINIMUM RAM	512 MB
MIN. CLOCK FREQUENCY	600 MHz
MOUSE OPERATION	recommended

CONFORMITY	
	CE, UKCA

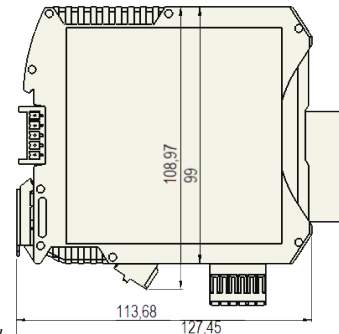
front view



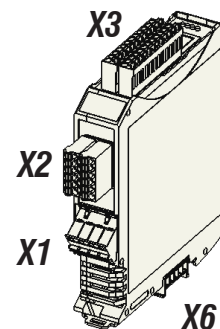
top view



left side




perspective view



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

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