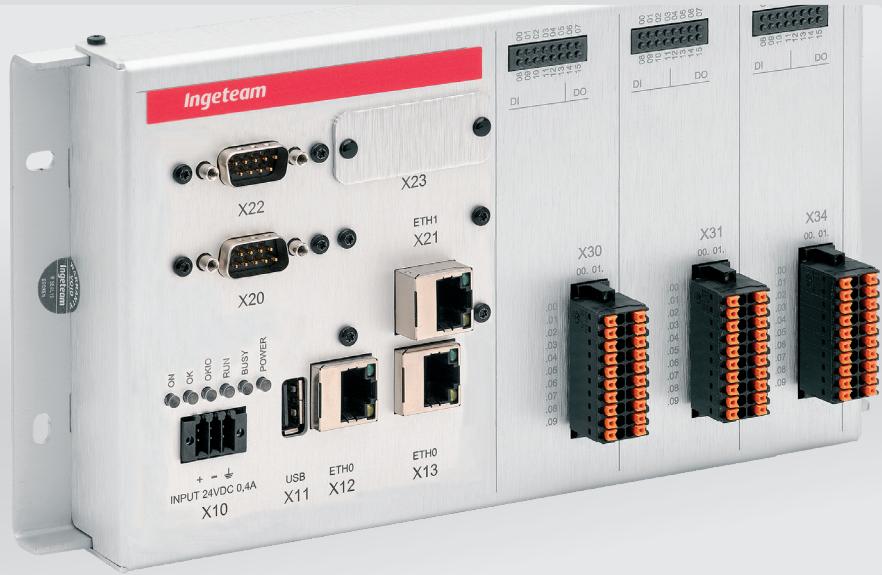
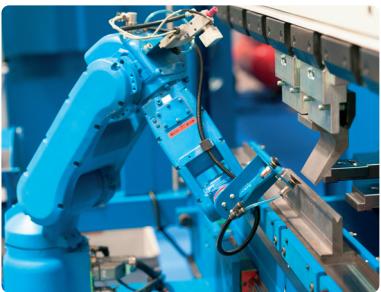


**INGESYS****CMS4**

Online Machinery Monitoring



INGESYS™ CMS4 is a customisable and internally modular online monitoring system. Designed for the industrial sector, it anticipates the appearance of functional anomalies in the machine, based on the analysis of its variables (vibrations, temperature, position, etc.).

### Customisable Monitoring Solution for Industry 4.0.

#### Main Functional Features

- Modular architecture that can be adapted to the needs of each machine
- Designed for the industrial environment (demanding environments in terms of EMC and vibrations)
- Open system, programmable by the user in SIMULINK or IEC61131
- Capture and processing of a wide range of signals (position, accelerometers, temperatures, analogue values in V/I, digital signals, etc.)
- Distributed capturing via Ethernet RT
- Data logger functionality
- Integration with other automation elements using fieldbuses (CAN, RS485, etc.), Ethernet networks with MODBUS TCP, ETHERNET/IP or ETHERNET RT with PROFINET or ETHERCAT
- Communication protocols for connection to the cloud (SFTP, MQTT)
- Expandable memory for logging information
- Web server for local monitoring and parameterising

#### Advantages

- ✓ Hardware and software user customizable
- ✓ Designed for industrial environments
- ✓ Integration in the most commonly-used industrial networks
- ✓ Maintenance cost optimization

		<b>System</b>
<b>Main Power Supply</b>		24Vdc (+25% / -30%) Class S1
<b>Maximum Consumption</b>		24V @ 300mA / 110V @ 80mA
<b>Dissipated Power</b>		8W (max.)
<b>Memory</b>		Program: 1Mb Data: 1Mb Non-volatile data: 62Kb Register: 32Mb expandable to 4Gb
<b>Programming</b>		Simulink, IEC61131-3 languages
<b>Data Logger</b>		Recordable variables: 1024 Consecutive logs: 32 Maximum number of variables that can be recorded in a log configuration: 64 Log buffer: 512kb Simultaneous logs: 2 Maximum number of log configurations: 32
<b>Monitoring and Maintenance</b>		Integrated user-configurable web server USB port for loading/unloading firmware, application, data log, etc.
<b>Ethernet Interfaces</b>		2 x 10/100Base TX RJ45 Ethernet ports with internal switch + 1 x 10/100Base TX RJ45 Ethernet port* Protocols: SFTP, MQTT, Modbus TCP/IP, Ethernet/IP, PROFINET, ETHERCAT
<b>Fieldbus Interfaces</b>		Up to 4 DB9 ports: CANOPEN(Master/Slave), Profibus DP Slave, RS232/RS485
<b>Wireless Interfaces</b>		WiFi, 3G
<b>Digital Input Module</b>		16 x DI (24Vdc @ 3mA)
<b>Counter Input Module</b>		1 incremental input encoder 24Vdc, 24-bit counter
<b>Analog Input Modules</b>		8 x AI ( $\pm 10V$ or $\pm 20mA$ ) 8 x AI (PT100, NTC or Thermocouple) 2/4/8 x AI (fast synchronous) up to 100Ks/s, for ( $\pm 10V$ or $\pm 20mA$ ) or IEPE accelerometers
<b>Relay Output Module</b>		3 outputs (150V @ 5A)
		<b>Standards</b>
<b>Labelling</b>		CE
<b>Immunity and Emission</b>		EN 50121-3-2:2007
<b>Temperature Range</b>		EN 50155:2007 [Class TX (-40°C at +70°C)]
<b>Vibrations</b>		EN 50155:2007 [Body Mounted, Class B] / IEC 61373:2007
<b>Protection Against Fire</b>		EN 45545-2
		<b>Mechanical Features</b>
<b>Assembly</b>		Panel, DIN Rail
<b>Material</b>		Aluminum
<b>Dimensions (H x W x D)</b>		(149mm to 524mm)** x 135mm x 34.6mm
<b>Design</b>		Internally modular. Maximum 10 I/O modules

\* Optional

\*\*Depending on the number of I/O modules selected, each with a width of 37.5 mm.