

# PA-4

## Process Analyser 4

The powerful, all-round monitoring system



PA-4 is an all-round monitoring system which can be used to safe guard a wide range of machining processes, from very simple to quite complex. It's this versatile application ability, combined with the PA-4's extensive feature set that makes this the monitoring system of choice for many customers.

User-friendliness is built into the PA-4's software design of the menus and soft key operated dialogs, making the PA-4 fast to learn and universally compatible. The high contrast bright backlit display make analysis of the information displayed easy under all lighting conditions.



### Versatility and power

The PA-4 can monitor 4 sensors and can accommodate up to 4 output relays

Compact yet powerful, the PA-4's core task is the continuous monitoring of repeating machining processes. The robust metal case is designed especially for use in harsh production environments. The 4 sensor input capability is enough to manage even quite complex machining processes.

Each individual signal can be monitored through envelop limits, box limits (max 3 per channel) and target limits. Trend analysis will help maximizing tool life. It allows prediction of the remaining cycles before the cutting tool needs to be sharpened or replaced. The zoom function allows for quality control of even the finest of machining treatments.

System Capabilities Overview	PA-2
<b>Sensor capability</b>	
Sensor inputs	4
Digital inputs	8
<b>Functions</b>	
Box limits (per channel)	3
Block limits (per channel)	✗
Envelope limits (per channel)	2
Target limits (per channel)	1
Zoom function	✓
Smart limit	✗
Machine data acquisition	✗
Tool life counter	2
External process selector	Option
High speed stamping mode	✓
Missing part detection	✓
<b>Communication</b>	
Output relays	4
Serial ports	1
GPS modem	Option



Use the PA-4 to eliminate faulty production and increase productivity

## Communication and connectivity

The PA-4 comes standard equipped with 4 output relays, which can be tied to the machine's alarm lighting and/or can activate the emergency stop function. This allows the machine to cease production immediately when a problem is detected, reducing waste and ineffective production time. The standard serial connection is used to connect primarily for data download and analysis and software revision uploading.

Optionally, the PA-4 can be equipped with an GSM pager function. This means that in the event of an alarm, a message can be forwarded directly to a mobile phone. By immediately informing the responsible personnel - job scheduling, maintenance or production management – quick action can be taken and downtimes can be reduced to a minimum.

The hardware structure allows the connection of all different sensor types offered by argotech (see separate sensor overview datasheet). The PA-4 can also be daisy chained via a CAN Bus, thus establishing a network of Multi Alarm Paging Systems which can monitor the entire production plant.

## Detectable machine conditions

The PA-4 can be used to detect a number of conditions which can lead to poor quality production or unnecessary machine downtime.

- Tool wear / fracture
- Determination of forces in machine components
- Press force monitoring Overload protection
- Machine and tool loads
- Closing power control
- Collision protection
- Product quality
- Limit value monitoring (filling level, temperature, ...)

