The universal genius
KS 98-1 *advanced*

Multi-function controller with mini PLC tasks

Because it is modular in every respect (functions, I/O hardware, and interfaces), the KS 98-1 is not only perfectly suited for demanding, interlinked control loops, but also for simpler measurement & control tasks. But above all, what is equally important for simple and complex tasks: Customized operating concepts in the user's language, that everyone understands. The "day & night" display of the KS 98-1 is bright and clear under all lighting conditions. For example, event-driven switchover is possible for the background colour (red/green) and the display mode (normal/inverse). Cascade control, programmer, and anything else you can think of:
Get all the details of the new possibilities offered by the graphical Engineering Tool ET/KS 98 and the simple parameter adjustment using PMA's standard configuration tool BlueControl® for this new universal genius.

Data sheet and flyer KS 98-1 Item 01

vario*EC* – Extruder automation

Customized for practical use

With a 12-inch TouchPanel – as supplement for the vario*ECmini* with 5.7-inch screen – the larger version vario*EC* is now available for complete extruder automation. With both systems, individual adaptation to the extruder is configured directly via the terminal.

The hardware is based on the KS vario multi-controller, and is modular for easy expansion. In this way, the entire system is fully functional right away. The new vario*EC* comes fully equipped for extrusion plants with 2 drives and up to 20 temperature zones.

Ask for more information on the other practical built-in features.

Data sheet and flyer vario*EC* Item 02

PMA Prozeß- und Maschinen-Automation GmbH

Wir kriegen's geregelt
Close the loop with PMA

TouchPanel with PLC and control

New PMA family:

KS 108 *advanced*

Pre-order your information material on the KS 108 *advanced* family Item 03

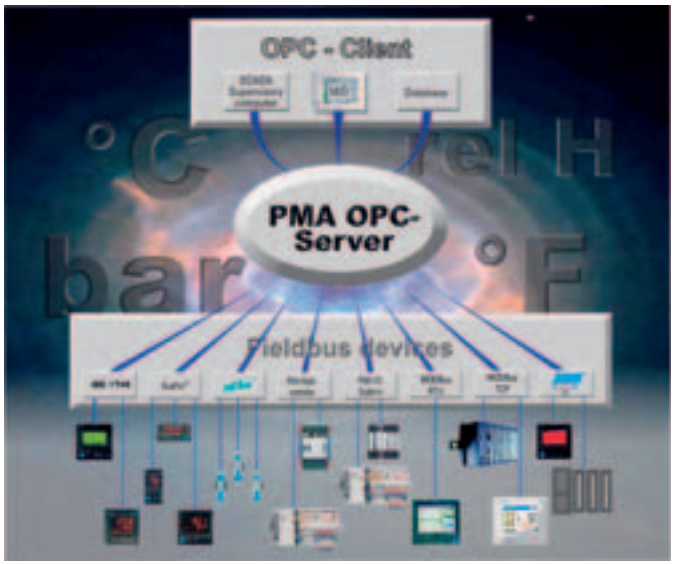
Controllers in all formats – a central theme for PMA since decades! PMA has now created an additional product line. With the basic unit **KS 108 *advanced*** we now offer a compact Panel PC with Touch operation, and fitted with the comprehensive function library of the KS 98 as standard. By means of PMA's I/O systems – RM 200 or vario I/O – the process interfaces can be adapted precisely to the application. Programming is according to IEC 61131 using CoDeSys, whereby ready-to-use screen displays for operation and parameter setting are available in addition to PMA's controller function blocks. This first member of the new, universal product line is named **KS 108 *flexible***. Parameters are adjusted easily with the established BlueControl® configuration tool. Ask for more information on additional solutions provided by PMA with the KS 108 *advanced* range.

Data acquisition – a simple matter!

PMA's new OPC Server connects them all!

PMA's OPC Server provides the link between different equipment technologies and the availability of process data in the application software. From the user's view, it makes no difference which protocols are used for communication, as all the devices connected to the system are clearly defined and easily accessible in the OPC Server.

PMA's OPC Server permits you to connect PMA equipment and other third-part field bus devices quickly and easily by means of your Windows OPC Client software.



Data sheet OPC Server Item 04

Temperature and humidity

New digital humidity meter – LowCost precision

This new digital transmitter is particularly suited for monitoring relative humidity (rH/%), for example in air-con systems and industrial processes. Thanks to the two-wire technology and an integrated temperature sensor (Pt 1000), the transmitter offers several advantages in terms of installation and wiring. The digital display provides detailed on-site information. Our detailed data sheet shows the different versions and their options for wall or in-duct mounting.

Data sheet HS Item 05

Optimized gas flow for utilities

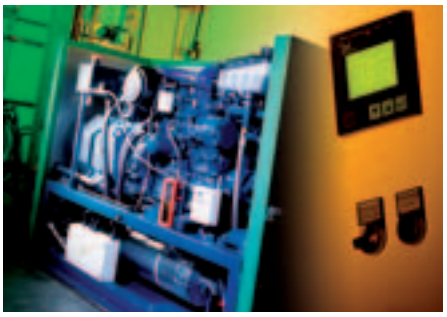
Industrial companies and municipal utilities usually receive their gas from a regional gas supplier, who has a contract with an upstream provider. In order to keep the purchase prices low, the regional supplier is interested in maintaining a possibly constant gas flow, i.e. to avoid expensive demand peaks, because the surcharge is determined by the quantity and duration of peaks within the agreed tariff period.
This compact SCS 2510 station automation system provides sequencing, control, operation, diagnostics, communication, and visualization – thus highlighting the special advantages of an integrated PC platform with high processing speed that even offers web server functionality. The system is built up using components supplied by PMA in Kassel. The touch-panel PC (IQT-615 Touch) is linked to the control room, and an Ethernet connects the I/O modules (vario I/O with Modbus TCP protocol) of the decentralized peripheral equipment. An individually adaptable multiple cascade controller (based on a PMA "soft" controller block) with override functions is installed in the PC together with a "Soft PLC" (based on CoDeSys) that runs a customer-specific program. Apart from supply optimization, numerous other functions are implemented in the system, such as measurement data acquisition, counter protection, flow control, output pressure control, etc. Thanks to the selected PC technology, the user acquires an exceptionally compact operating station with high functionality featuring transparent fingertip control and operability.

Data sheets of new IQT family and Soft PLC Item 06

Energy from rape oil for detached houses

Block-type combined heat & power (CHP) plants running on vegetable oil provide heat and power from stored regenerative solar energy – for a decentralized and ecologically compatible (CO_2 neutral) supply of energy. A diesel engine fuelled with rape oil, the generator for electric power, and the heat exchangers for utilizing the exhaust heat are combined in a compact block in a highly effective sound absorbing enclosure.

These CHPs are designed specifically for detached houses, remote mountain refuges, schools, and even small companies.
The KS 98 multi-function unit from PMA handles the entire operation, visualization, control, and monitoring functions including timing (operating hours counter, maintenance intervals). All the information required for plant operation is shown on the display.



Data sheet KS 98-1 Item 07

Decentralized monitoring of electrical supply quality

PMA's DataMonitor installed in transformer substations

The easy-to-operate paperless DataMonitors from PMA are used in transformer substations for:

- Recording the levels of the supplied voltages
- Recording voltage drops
- Checking the voltage regulator settings

These quality-monitoring functions help in the clarification of disturbances, as the recorded data can be analysed quickly by service personnel.

Exceeded limits are signalled directly to the grid control station via modern communication links (internet, radio networks, etc.).

Data sheet KS 3005 Item 08

Energy from biogas for companies

Biogas plants provide ecologically compatible energy. Hereby, methane gas is produced in fermenters from plant waste or liquid manure. The generated gas powers the IC engine in a block-type heat & power plant (surplus electricity is fed into the grid). KS 92-1 controllers handle the thermal process, lambda control, and alarm functions.

Data sheet KS 92-1 Item 09

Topical information

New PMA CD available in May!

This new issue of the CD contains all the current versions of our engineering and configuration tools as well as all the topics from our website, including application reports, detailed data sheets, and operating instructions of all PMA product ranges.

New PMA CD Item 11

What's more ....

... the KS 98-1 has been certified to DIN 3440 – we are expecting the UL certificate in April

... with PMATune and PIDMA, PMA now offers products for "robust" PID self-tuning procedures that will also be used for central tasks in university research projects

... the plug-in screw terminal strips of the *rail line* family, RM 200, and KS 800/816 now have mechanical coding

... we have presented the latest translations of PMA feature articles from trade journals on our website.

Salt baths operated with BluePort® controllers

Precise temperature control is essential in heat treatment plants. The salt bath crucibles are heated with gas or electrical power, whereby accuracies down to a degree are called for.
KS 40-1 and KS 90-1 BluePort® controllers are used for this demanding task.

Broch. BluePort®-Controller Item 12

Visit our website for the latest topical information:

www.pma-online.de

Friedrichshafen 17th to 21st October 2006

MSV Brno 2006, Brno, Czech Republic, 18th to 22nd September 2006, Profess

MSV 2006

BIAS, Milan Italy, 20th to 23rd September 2006, FASE

NPE, Chicago USA, 19th to 23rd June 2006, Danaher

Vienna, Austria, 10th to 13th Sept. 2006

Details of other international exhibitions and fairs at which we will be present with our distributors under: www.pma-online.de/en/fairs/index.html

Germany
PMA
Prozeß- und Maschinen-
Automation GmbH
Miramstraße 87, 34123 Kassel, Germany

Fon: +49 / 561 / 505 - 1307 Fax: - 1661
E-mail: mailbox@pma-online.de
Internet: http://www.pma-online.de