System Concept

NORISYS 4 is an automation platform which has been specifically designed for harsh environments and for use with highly dynamic processes.

At the heart of the system, there is a programmable logic controller unit (featuring a 32-bit processor) that meets the requirements of the IEC 61131 standard. The IPC version of the NORISYS 4 CPU elegantly combines what industry wants from a PLC with a level of PC technology performance that is suitable for harsh environments. One of the key features is the built-in web server, which allows integration into existing network structures and provides access to an implemented process visualisation. A couple of controller and user interface units can be combined with the redundant CANbus connection to create a multi-master communication structure.

One PLC unit controls up to 16 process interface modules whose processing architecture has been designed to allow software-based parameterisation. Digital channels can be set up as inputs or outputs. Analogue signal channels can be configured for different standard signals via software.

To ensure a compact system design and provide an efficient way of managing custom signal processing, the system contains a universal input-output processing unit with expansion slots for different signal cards.
Programmable logic controller according to the IEC 61131 standard featuring a 32-bit, 400 MHz processor and integrated web server. An optional data logger function can store up to 32 GB of data on SDHC cards.

- 4 x galvanically isolated digital inputs
- 4 x relay outputs
- 2 x CANbus
- 2 x Ethernet
- 1 x EIA-232/422/485
- 1 x RS-485 (NORISYS 4 ExtBus)
- USB
- SDHC card slot

**NORISYS 4 UNIO**

Process interface unit for universal input-output processing which can be expanded by using different signal cards. Two module slots can be equipped with cards for analogue standard signals and temperature measurement as well as for custom cards. Each analogue standard signal channel can be configured as a 0...5 V, -5V...+5 V, 0...10 V, -10 V...+10 V, 0...20 mA or 4...20 mA channel.

- 2 x signal card slots
- Signal cards:
  - AI card: 4 x analogue inputs, 1 x digital input, 1 x relay output
  - AO card: 4 x analogue outputs, 1 x digital input, 1 x relay output
  - PT100 card: 8 x PT100 channels
  - 1 x RS-485 (NORISYS 4 ExtBus)

**NORISYS 4 VMP70**

TFT touch panel with 17.78 cm (7") display and redundant CANbus interface. A data logger function for up to 1 GB of data is optionally available.

- 2 x CANbus
- 1 x Ethernet
- 1 x RS-232
- SD card slot
- USB

**NORISYS 24DIO**

Process interface unit with 24 digital channels which can be configured as inputs or outputs via software. All channels are short-circuit proof and can drive up to 0.5 A.