KUHNKE

# IMPULSES FOR AUTOMATION

## Ventura and Ventura touch

**Ventura, the PC-based, variable-performance control platform**

- Scalable processor capacity
- No rotating storage hardware
- No fan
- 24 V power supply
- Expansion slot
- Interfaces: 2 x USB, 2 x Ethernet, 2 x COM, CANopen
- 2 CF card drives or hard disk
- DVI display adapter port
- Fast booting
- Operating systems: Microsoft® Windows® CE .NET or Microsoft® Windows® XP embedded

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## System description

**Ventura and Ventura touch**
The **Ventura** control platform is scalable in both price and performance. Its modular design and standard on-board interfaces support flexible control solutions providing for future developments in automation. Key characteristics are the unit's passive cooling, fanless operation and CF cards used as mass storage media.

The mechanical and electrical design of the **Ventura** control platform ensures reliable control and actuation of machines under tough everyday conditions of the industry and warrants that all data is safe even in the event of power failures.

It is shock-proof and vibration-proof, features low-voltage protection and EMC compliance plus compatibility with temperatures up to 50 °Celsius.
Its scalability is specifically underlined by the integration of ETX modules up to Pentium M-class processors – units with 100, 266, 733 and 1000 MHz clocks are currently available. They are the logic core of add-on peripherals such as a plug-type hardware PLC, various I/O modules and other tailored modules. Standard ports to CANopen, DVI, Ethernet, COM and USB let **Ventura** satisfy all communication needs.

Two compact flash drives allow application and machine data to be separated from the operating system. The **Ventura** platform installs or mounts either in a switching cabinet or immediately behind **Ventura touch**.

**Ventura touch,** the new control and display monitor, features a high-quality and long-life TFT display available in sizes 6.5'', 10.4'' and 12.1''. At the front it has IP65 protection.

## Software

Operators can rest on the support of CoDeSys, the control and programming system with real-time functionality in compliance with standard IEC 61131-3 plus CoDeSys SP, the cross-platform PLC runtime system in conjunction with the operating systems **Microsoft® Windows® CE** and **Microsoft® Windows® XP embedded**.

**CoDeSys** is one of the most powerful IEC 61131-3 controller programming tools available for Windows® environments. All five programming languages of the standard are supported. CoDeSys generates native machine code for all commercially available processors. Moreover, CoDeSys combines the capabilities of high-level programming languages such as C or Pascal with the simple handling and the functionality of a PLC programming system.

Apart from the programming system, the package also contains a manual and an online help engine. Operators can choose from German, English and French variants.

**CoDeSys components**
Editors allow the programming of instruction lists, sequential function charts, function diagrams, Structured Text, ladder diagrams, and function diagrams in free graphics mode.

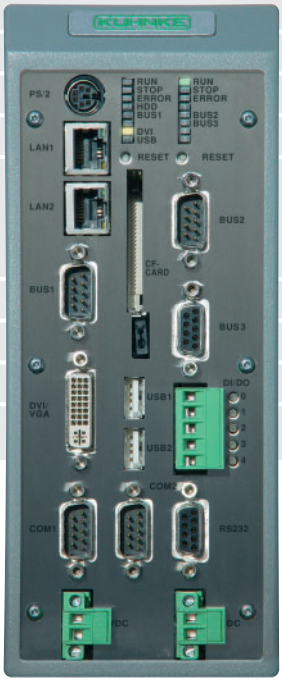
**Other benefits**
- Comprehensive offline simulation
- Integrated visualisation
- Integrated bus configurators for CANopen, PROFIBUS and AS-i
- Integrated motion functions

## Technical data Ventura

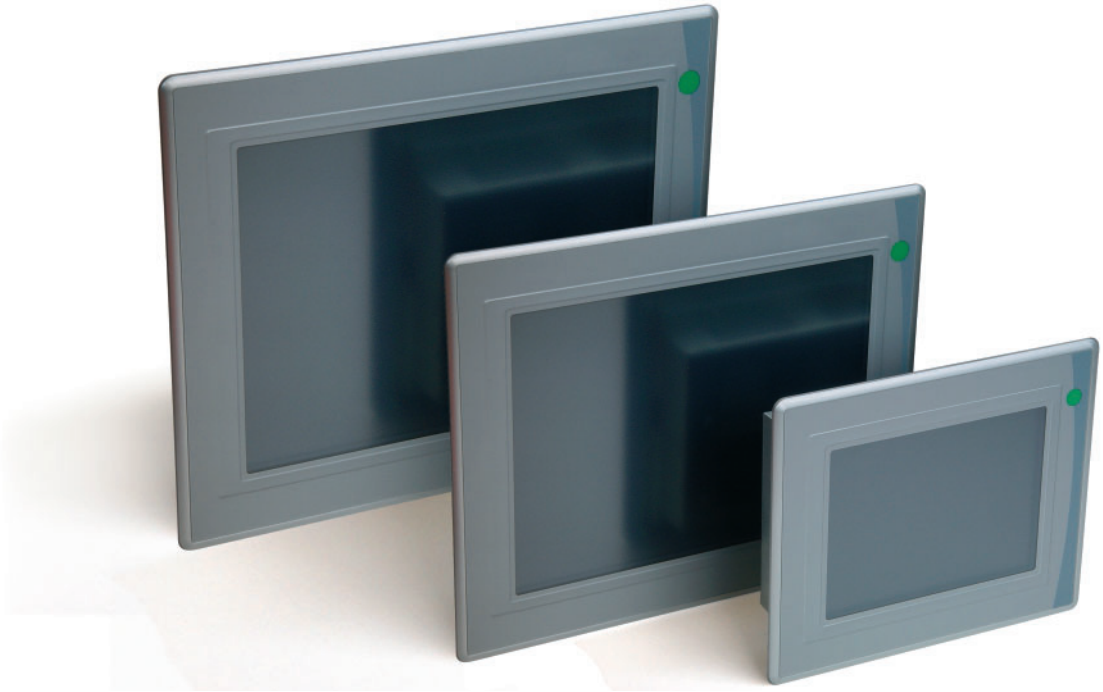
| | Ventura 100 | Ventura 300 | Ventura 700/1000 |
|---|---|---|---|
| Processor | 100 MHz STPC eLite | 266 MHz Geode | 733 MHz/1 GHz ULV Celeron |
| Cooling | Passive | | |
| Protection | IP20 | | |
| Status indication by LED | Run, Stop, Error (SPS), Bus (CANopen), DVI, USB | | |
| Reset button | Located at the front | | |
| Housing | Stainless steel | | |
| Main memory | 128 Mbyte SD-Ram | | |
| Compact flash card | Types I and II, boot-enabled, 1 x internal | Types I and II, boot-enabled, 1 x front, 1 x internal | |
| Serial port | COM1 | COM1, COM2 | |
| Ethernet | 10/100 Base-T with RJ45 socket | 2 x 10/100 Base-T with RJ45 socket | |
| USB | 2 x USB (0.5 A) | | |
| LCD adapter | none | DVI/VGA | |
| Keyboard/Mouse | PS/2 | | |
| CANopen | 9-pin SUB-D, max. 1 Mbit/s | | |
| Power supply | 24 V DC (18 ... 28 V DC) | | |
| Ambient temperature | 0 ... 50 °C | | |
| Dimensions (H x W x D) | 190 x 55 x 130 mm | | 190 x 77 x 130 mm |
| Operating system | Microsoft® Windows® CE .NET or Microsoft® Windows® XP embedded | | |

## Additional technical data for Ventura+ and Ventura FB *

| | Ventura+ | Ventura FB |
|---|---|---|
| Function | Industry-standrad PC w/ integrated PLC hardware | Industry-standard PC w/ intergrated interface board |
| Processor | XC 167 | |
| Status indication by LED | Run, Stop, Error (SPS), Bus1, Bus2, 5 I/Os | |
| Reset button | Located at the front | |
| Interfaces | CANopen max. 1 Mbit/s, PROFIBUS DP max. 12 Mbit/s, RS232 | |
| Inputs/outputs | 4 inputs/outputs, 1 input<br>Outputs: 0.5 A<br>Inputs 0.5 ms rising delay or<br>counter inputs ABRef and AB (10 kHz) | |
| Software | CoDeSys | none |
| Power supply | 24 V DC (18 ... 28 V DC) | |
| Ambient temperature | 0 ... 50 °C | |
| Dimensions (H x W x D) | 190 x 85 x 130 mm | |



* Basic data see Technical data Ventura



## Technical data Ventura touch

| | Ventura touch 6,5'' | Ventura touch 10,4'' | Ventura touch 12,1'' | Ventura touch 12,1'' XGA |
|---|---|---|---|---|
| TFT display size | 6,5'' | 10,4'' | 12,1'' | |
| Display adapter | DVI | | | |
| Brightness (typ.) | 400 cd/m$^2$ | | 350 cd/m$^2$ | |
| Life of backlighting | 50,000 h | | | |
| Resolution | 640 x 480 | | 800 x 600 | 1024 x 768 |
| Touch | 4-wire analogue resistive | | | |
| Touch port | USB or V.24 | | | |
| Protection (front) | IP65 | | | |
| Power supply | 24 V DC (18 ... 28 V DC) | | | |
| Ambient temperature | 0 ... 50 °C | | | |
| Dimensions (H x W x D) | 200 x 165 x 50 mm | 280 x 232 x 50 mm | 320 x 265 x 50 mm | |

## Order data

| Part number | Element | Description |
|---|---|---|
| **639.100.00.00.10** | Ventura 300 CE | AMD Geode GX1 266 MHz, 128 MByte RAM, DVI, Ethernet, CANopen, RS232, 24 V power pack, operating system Microsoft® Windows® CE .NET on 128 MB CF card |
| **639.100.00.00.20** | Ventura 300 CE+CO | AMD Geode GX1 266 MHz, 128 MByte RAM, DVI, Ethernet, CANopen, RS232, 24 V power pack, CoDeSys Runtime operating system Microsoft® Windows® CE .NET on 128 MB CF card |
| **639.100.00.00.30** | Ventura 300 CE+CO +TAR | AMD Geode GX1 266 MHz, 128 MByte RAM, DVI, Ethernet, CANopen, RS232, 24 V power pack, operating system Microsoft® Windows® CE .NET on 128 MB CF card, CoDeSys Runtime, target visualisation |
| **639.100.01.22.00** | Ventura 300+ XP | AMD Geode GX1 266 MHz, 128 MByte RAM, DVI, Ethernet, CANopen, RS232, 24 V power pack, Slot-SPS w/ PROFIBUS, CANopen, RS232, 24 V DC power pack, runtime system 5 I/O, operating system Microsoft® Windows® XP embedded on 512 MB CF card |
| **639.100.02.00.30** | Ventura 300FB CE+CO +TAR | AMD Geode GX1 266 MHz, 128 MByte RAM, DVI, Ethernet, CANopen, RS232, 24 V power pack, field bus board w/ PROFIBUS, CANopen, RS232, 24 V DC power pack, 5 I/O, operating system Microsoft® Windows® CE .NET, CoDeSys Runtime, target visualisation |
| **639.300.00** | Ventura touch 6,5'' | DVI adapter, USB/RS232 touch, 24 V DC power pack, 6,5'' TFT w/ touch |
| **639.310.00** | Ventura touch 10,4'' | DVI adapter, USB/RS232 touch, 24 V DC power pack 10,4'' TFT (VGA resolution) w/ touch |
| **639.320.00** | Ventura touch 12,1'' | DVI adapter, USB/RS232 touch, 24 V DC power pack 12,1'' TFT (SVGA resolution) w/ touch |
| **639.330.00** | Ventura touch 12,1'' XGA | DVI adapter, USB/RS232 touch, 24 V DC power pack 12,1'' TFT (XGA resolution) w/ touch |

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