



## System description

The Mini IPC **Ventura Skaleo** is designed to match any TS35 standard top hat rail. By simple interlocking of the module, all components are securely connected with each other safely and easily.

### EtherCAT® extension

The controller module of **Ventura Skaleo** supplies all Ventura FIO I/O modules attached to the unit with the needed operating voltage and drives the internal bus. A special expansion module allows easy connection of additional **EtherCAT slaves** to the controller.

### Decentral intelligence and communicative versatility

CoDeSys is used to program the **Ventura Skaleo** IPC. The unit is able to exchange data with external devices via either its Ethernet port (LAN) or its serial interface (RS232 or RS485). In addition, these interfaces allow the connection of cost-effective terminals for data visualization. A web server integrated into the control also allows **web-based visualization**. A SD-card slot offers the opportunity to store process data locally or to exchange the control software. Numerous status LEDs support superior error diagnosis. The controller module comes fully equipped with a direct interrupt-enabled input to allow fast reactions to processor events.

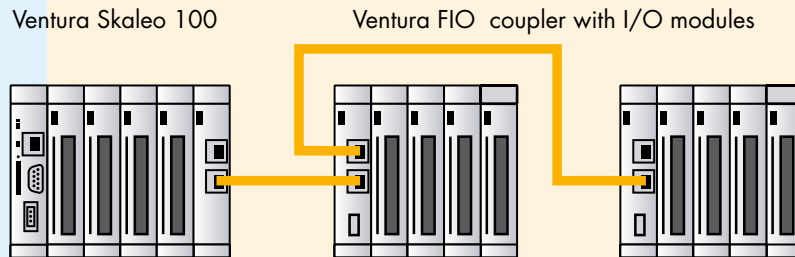
### Prepared for custom applications

Due to multiple standard interfaces and a variety of supported bus systems, the Mini IPC **Ventura Skaleo** is equipped for easy integration into existing control systems. In combination with the integrated **real-time clock**, the unit is an ideal solution for applications, such as condition monitoring, RFID, motion control or can be used as power controller.

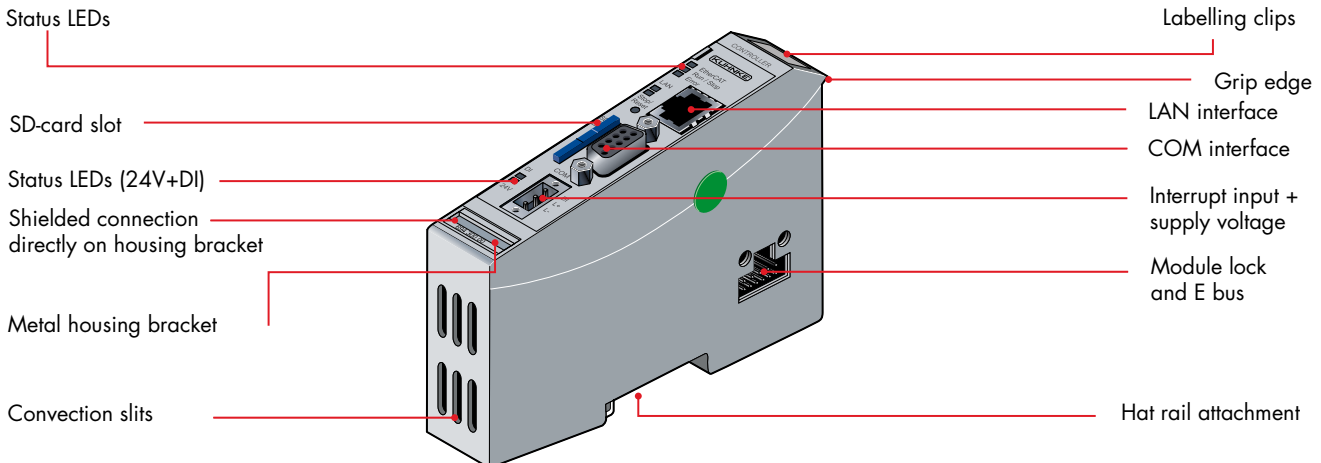
For further information, please refer to Technical Information E 740 ENG „Ventura FIO – EtherCAT® coupler and I/O module in compact design“.

## Ventura Skaleo as EtherCAT master

EtherCAT®



## Module structure



## Technical data

### Ventura Skaleo Controller 100

I/O expansion	via connector at the side of the unit
Field bus expansion	via extension module EtherCAT 100 Mbit/s
Communications interfaces	Ethernet, RS232, RS485
Programming system	CoDeSys 2.3
RAM	8 MB (256 kB for PLC software)
Flash EPROM	8 MB (approx. 6 MB for PLC software)
Remanent data	1 kByte
Integrated functions	1 DI, 24 V, 0.1 ms ms input, interrupt enabled Real-time clock Web server Web visualization
Type of connection	Spring-loaded plug with mechanical ejection
Operating voltage	24 V DC (-20 % / +25 %)
Temperature range	0° C ... +55° C
Protection	IP 20
Dimensions (W x H x D)	25 mm x 120 mm x 90 mm

### Ventura FIO I/O-Module

Field bus	EtherCAT 100 Mbit/s LVDS: E bus
I/O connectors	18- or 36-pole spring-loaded plug
Diagnosis	Status LED: EtherCAT, I/O, Power, I/O channel

## Order data

Description	Part number
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### Controller

Ventura Skaleo 100 RS232 (CoDeSys PLC)	694.300.00
Ventura Skaleo 100 RS485 (CoDeSys PLC)	694.300.01

### Bus coupler

Ventura FIO bus coupler, 3 A	694.400.00
Ventura FIO Extender, 1 Port	694.400.01*
Ventura FIO Extender, 2 Port	694.400.02*

### Digital I/Os

Ventura FIO DI16/DO16 5 ms/0.5 A	694.450.01
Ventura FIO DI16/DO8 1 A	694.450.02**
Ventura FIO DI16/DO16 1 ms/0.5 A	694.450.03
Ventura FIO DI16 5 ms	694.451.01
Ventura FIO DI32 1 ms	694.451.02
Ventura FIO DI16 1 ms	694.451.03
Ventura FIO DI32 5 ms	694.451.04
Ventura FIO DI8/DO8 5 ms/0.5 A	694.450.04**
Ventura FIO DI8/DO8 1 ms/0.5 A	694.450.05**
Ventura FIO DO16 0.5 A	694.452.01
Ventura FIO DO8 1 A	694.452.02**

### Analog I/Os

Ventura FIO AI4-I 12 bit	694.441.01
Ventura FIO AI8-I 12 bit	694.441.04
Ventura FIO AI4/8-U 13 bit (4 diff./8 s.e.)	694.441.02
Ventura FIO AI8/16-U 13 bit (8 diff./16 s.e.)	694.441.03
Ventura FIO AO4-U/I 12 bit	694.442.02

\* 1. quarter 2010

\*\* On request. Additional modules in preparation: counter, communication modules, functional modules

(More order data see next page)

## Order data

Description	Part number
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### Analog inputs temperature

Ventura FIO AI4-Pt/Ni100 16 bit	694.443.01
Ventura FIO AI8-Pt/Ni100 16 bit	694.443.02
Ventura FIO AI4-Pt/Ni1000 16 bit	694.443.03
Ventura FIO AI8-Pt/Ni1000 16 bit	694.443.04
Ventura FIO AI4-Thermo 16 bit	694.443.05
Ventura FIO AI8-Thermo 16 bit	694.443.06

### Counter/Posi/Drive

Ventura FIO Counter1 5 V/24 V	694.444.00**
Ventura FIO Counter2 5 V/24 V	694.444.01*
Ventura FIO Counter/Posi1 5 V/24 V	694.454.00**
Ventura FIO Counter/Posi2 5 V/24 V	694.454.01**
Ventura FIO Drive Control DC/EC 3.5 A	694.454.13

### Interface

Ventura FIO PROFIBUS-DP-Slave	694.455.03
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### Accessories

Potential distributor FIO 2 x 16 with 3-pin connection	694.411.00
Ventura FIO plug 2-pole 1 piece	694.100.02.01
Ventura FIO plug 18-pole 1 piece	694.100.18.01
Ventura FIO plug 36-pole 1 piece	694.100.36.01
Ventura FIO plug 2-pole 20 pieces	694.100.02.20
Ventura FIO plug 18-pole 20 pieces	694.100.18.20
Ventura FIO plug 36-pole 20 pieces	694.100.36.20
Ventura FIO shielded connection clamp 2 x 8 mm	694.412.01
Ventura FIO shielded connection clamp 14 mm	694.412.02

\* 1. quarter 2010

\*\* On request. Additional modules in preparation: counter, communication modules, functional modules



Ventura  
Skaleo

Ventura FIO  
bus coupler

Ventura FIO  
I/O module



Shielded connection clamp



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