MK307

PC/104, PC/104+ SBC based Modular computer

Features

- IP65 modular industrial computer
- Housing up to five PC/104 modules
- Four 18-pin rugged connectors on front panel for expansion modules signal input-output
- Industrial operating temperature range: –40°C to +70°C
- Basic hardware configuration of MK307:
  CPC307-04 CPU board
  VIM301 graphics controller board
  PS351-01 power supply module

Overview

Fastwel MK307 is a platform for modular computer designed to serve industrial, transport, governmental and other applications where environment is severe. Due to the modular design, Fastwel MK307 offers flexibility in its configuration to achieve optimum price/performance ratio for every particular usage.

Fastwel MK307 is based on stackable modular concept and standards promoted by PC/104 consortium (www.pc104.org).

Up to five PC/104-Plus electronic modules can be placed inside the rugged aluminum alloy housing. All connectors are located on the front panel providing easy access and allowing installation into blind compartments.

Fastwel MK307 features the IP65 dust and moisture protection of the housing and external cable connectors and can be supplied with a cradle for easy mounting. The side lid provides easy access to MicroSD and SIM cards.

Fastwel MK307 is based on CPC307 PC/104-Plus host CPU module, power supply module with wide input voltage range (from 10 to 36 V DC through rugged connector on the front panel) and may include additional video-controller, field bus, communication and navigation modules. The front-panel connectors provide access to standard computer interfaces, such as five COM ports, Fast Ethernet, two USB 2.0, PS/2, VGA, LVDS, two CAN ports. Four additional front-panel 18-contact connectors can be used for interfacing with customer's application-specific expansion modules.

Technical Specifications

Interfaces

- VGA, LVDS, LCD up to 1280×1024, EL up to 640×480
- LAN: 10/100 Mb/s Base-T
- USB: 2 ports, 2.0 support
- PS/2: keyboard and mouse port
- Two isolated CAN 2.0
- Serial ports:
  COM1: RS232/RS485/RS422, without opto isolation, up to 460,8 Kb/s;
  COM2: RS232/RS485/RS422, without opto isolation, up to 460,8 Kb/s;
  COM3: RS232, full control, up to 115.2 Kb/s;
  COM4: RS232, full control, up to 115.2 Kb/s;
  COM5: RS422/RS485, optoisolated, up to 3000 Kb/s;
  COM6: RS422/RS485, optoisolated, up to 3000 Kb/s;
- Power supply socket, 10-36 VDS
- Sockets for connection of two Micro-SD cards

Software support

- FREEDOS
- Windows® XPe, CE 5
- Linux® 2.6
- QNX® 6.4

Optional Expansion Modules

- GPS/GLONASS receiver
- Quad-band GSM GPRS/EDGE wireless communication module
- 2 sockets for SIM cards
- Up to three additional PC/104+ expansion boards

Mechanical

- Dimensions: 216×153×142 mm (8.5"×6.0"×5.6")

Power supply

- 10–36 V DC

Environmental conditions

- Operating temperature range: –40°C to +70°C
- Non-operating temperature range: –55°C to +90°C
- IP65 dust and moisture protection
- Single/multiple shock resistance: up to 100G/50G
- Vibration: up to 10G

List of deliverables

- MK307 assembled:
  Housing
  CPC307-04 module
  CNM350-01 module*
  VIM301-01 module
  Power adapter
  PS351-01 power supply module
- CD with documentation
- Accessories for optional expansion modules

Warranty
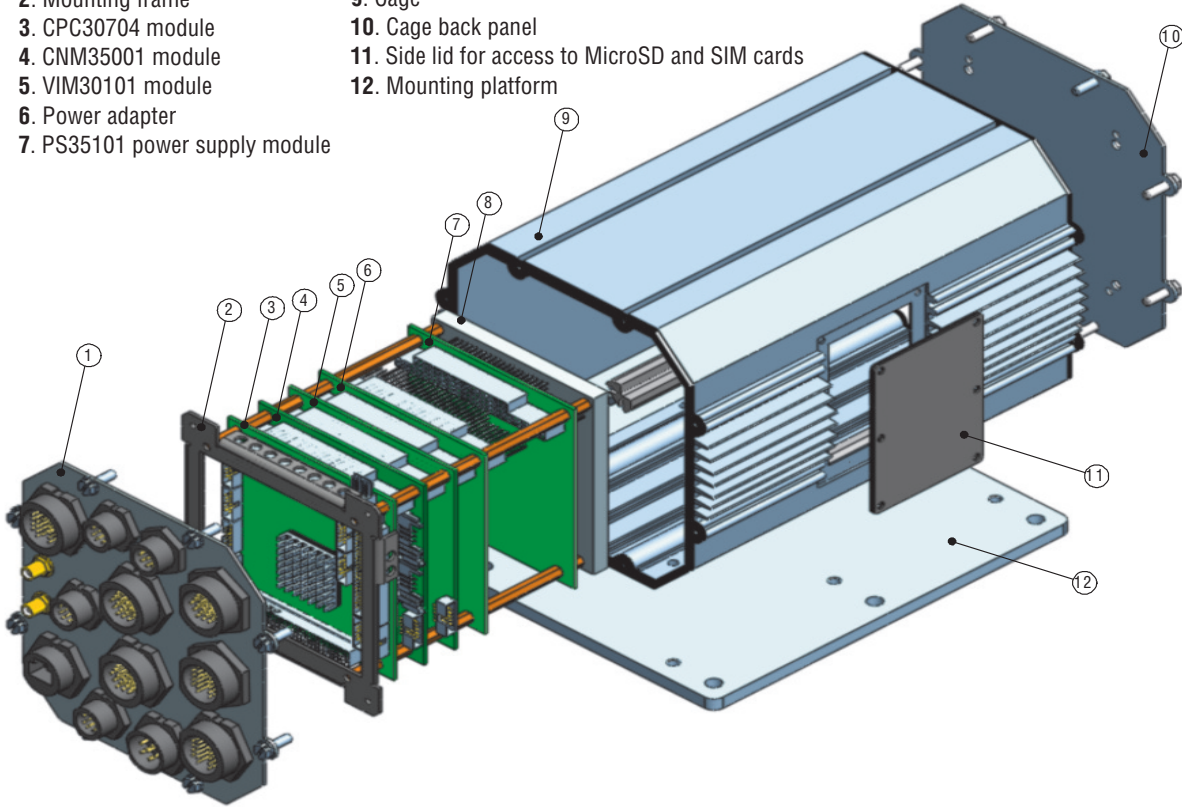
- 3 years for parts and labor

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* for MK307-01 only

Design Details

1. Front panel with connectors
2. Mounting frame
3. CPC30704 module
4. CNM35001 module
5. VIM30101 module
6. Power adapter
7. PS35101 power supply module
8. Power supply radiator
9. Cage
10. Cage back panel
11. Side lid for access to MicroSD and SIM cards
12. Mounting platform

Ordering Information

MK307 Configuration

MK307-01

Device Type	
MK307-01	CPC307-04, VIM301-01, PS351-01, CNM350-01
MK307-02	CPC307-04, VIM301-01, PS351-01

Example
MK307-01
CPC307-04, VIM301-01, PS351-01, CNM350-01

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READY FOR
RoHS

PCI/104-Plus MODULES
EMBEDDED-PC

CE

TÜV CERT
EN ISO 9001:2000
Zertifikat: 75.100.9545
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