

#### **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

- CD with documentation
- · Accessories for optional expansion modules

#### **Warranty**

• 3 years for parts and labor

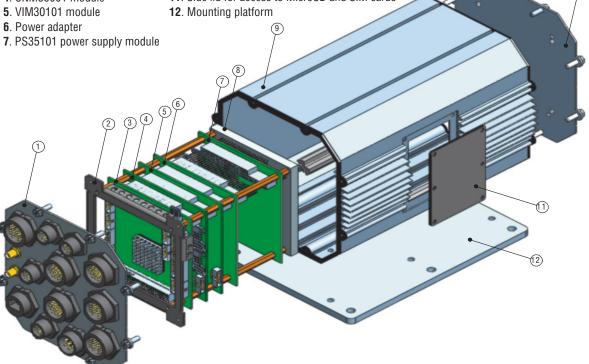
<sup>\*</sup> for MK307-01 only

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

## **Design Details**

- **1**. Front panel with connectors
- 2. Mounting frame
- 3. CPC30704 module
- 4. CNM35001 module
- 6. Power adapter
- 8. Power supply radiator
- 9. Cage
- 10. Cage back panel





# **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

Ver. 1.12.2015

Product specifications are subject to change without notice

#### **FASTWEL GROUP Co. Ltd**

**Corporate Offices** 

108 Profsoyuznaya str. Moscow, Russia 117437 Tel: +7 (495) 232-1681 Fax: +7 (495) 232-1654 E-mail: info@fastwel.com Web: www.fastwel.com

#### **FASTWEL Corporation US**

Fastwel Corporation US 6108 Avenida Encinas, Suite B, Carlsbad, CA 92011. Phone: 858-488-3663 E-mail: info@fastwel.com







