emVIEW-7/RPI3+

7.0" Panel PC Systems based on Raspberry Pi 3 B+ system

PRODUCT DESCRIPTION

With emPC-A/RPI3+ Janz Tec AG provides a device which uses an original Raspberry Pi 3 model B+ module inside. This module is mounted on a self-developed mainboard providing a $24V_{DC}$ power supply, an additional CAN interface, a real-time clock, digital inputs and outputs and an additional RS232/RS485 interface.

Janz Tec updated now the system with a 7.0" projected capacitive touch display for low cost applications such as maintenance and easy controlling of machines with the latest Raspberry Pi 3 B+ module.

Customer can order that system with integrated µSD card. Or they integrate the storage medium on their own.

A second option is to order the system with µSD card and pre-installed operating system and device drivers. CODESYS SoftPLC can also be pre-installed optionally.

FEATURES

LCD-Display

- 7.0" WVGA display size
- LED backlight technology
- Aspect ratio 15:9 (Landscape)
- Resolution 800 x 480
- Luminance 350 cd/m² (typ.)
- Front frame in brushed aluminum or black

Touch Screen

- Projected capacitive touchscreen (PCAP) (with multitouch capabilities)
- Glass surface

Processor

- Powered by Raspberry Pi 3, Model B+
- Quad-Core CPU based on ARM Cortex-A53 with 4 x 1.4 GHz [1]
- Fanless cooling concept
- Real-time clock, battery buffered

Memory

- System memory 1 GB DDR2 RAM
- External accessible µSD card slot

Interfaces (same as with emPC-A/RPI)

- 1 x 10/100/1000 MBit/s Ethernet
- 1 x HDMI graphic interface
- 4 x USB (v2.0)
- 1x BCM43143 WLAN on board
- 1 x 9-pin D-SUB connector for serial debug console
- 1 x I/O connector, providing:
  - 1 x CAN
  - 1 x RS232 or switchable to RS485
  - 4 x digital inputs (isolated from logic)
  - 4 x digital output (0.5 A max.)

[1] CPU performance will be reduced by software in our standard OS image to 4 x 600 MHz for protecting the system against overheating. Using only 1 core with full 1.4 GHz is also possible, pls. see hardware manual for more detailed information

Power Supply

- Input 9 … 32 V_{DC}
- Power consumption: 7 Watt

Physical

- Ambient operating temperature 0 °C ... 35/45°C[2]
- Non-operating temperature -20 °C … 75 °C
- Humidity 5 % ~ 95 %, non-condensing

Dimensions

- 203 x 121 x 55 mm (w x h x d)
- Weight approx. 0.6 kg
- DIN rail mounting

Software (optionally)

- Raspbian JESSIE light operating system
- CODESYS V3 runtime environment with Web View
- Oracle Java Embedded
- CANopen protocol stack and tools

[2] temperature range depends on mounting situation of the device, pls. see hardware manual for more detailed information

ORDERING INFORMATION

Ordering No.	Product Name	Description	List Price
SY-EMV-RPI37P	emVIEW-7/RPI3+	Industrial embedded controller panel hardware based on Raspberry Pi 3 B+	EUR 460.00
SD-MIC-008GB	Storage medium	8 GB microSD storage medium	EUR 35,00
SO-IMG-00001	Operating system image	Pre-installed Raspbian JESSIE lite operating system image including emPC-A/RPI device driver package (SD-MIC-008GB needs also to be ordered!	EUR 35,00
OE-NTW-PI15W	Power supply	External power supply unit	EUR 25,00
SO-CDS-SL001	CODESYS V3 Control for Raspberry Pi SL	Software licenses for CODESYS control runtime system and WebVisu. OPC UA server, EtherCAT Master, Profinet Master, Modbus TCP Master and Slave, Modbus RTU Master and Slave, CANopen, EtherNet IP scanner and adapter.	EUR 65,00
SO-JVM-EMB01	Java	Oracle Embedded Java SE Runtime license	on request
SO-SOF-XXXXX	CANopen	CANopen Stack ANSI-C Source code for master/slave, incl. CANopen DeviceDesigner, ready-to-run examples, user- and reference manual and 6 months support	on request
SO-SOF-XXXXX	CANopen-TCP/IP-Gateway	Universal TCP/IP-CANopen-Gateway according to CiA309-3, ASCII command interface to a complete CANopen master, supports main features of CiA309-3	EUR 49,00

RELATED PRODUCTS

emPC-A/RPI3+

Raspberry Pi 3 B+ based industrial grade embedded system

emIOT-Edge

IoT Edge Gateway for Industrial 4.0 solutions. Fanless and compact embedded flexible machine interface

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