SRP-M2i240-AH

PC-Based Panel Controller with CODESYS Control Runtime and Visualization

NEW

Features

Open Control Solution-Ready-Package Solution with PC-Based Panel Controller

- Intel® Core™ i3-6100U processor with 8 GB DDR4 SODIMM
- Industrial-grade LED LCD with a lifespan of 50,000 hours
- 1 x RS232, 1 x 1 x RS-232/422/485, 2 x USB 3.0, 2 x USB 2.0, 1 x Audio, 1 x DisplayPort 1.4 Out
- Modular design enables flexible configuration and easy maintenance
- IP66-rated front panel protects against water and dust
- Microsoft Windows Embedded 7 Pro 32-bit installed

CODESYS Control Runtime and Visualization

- Preinstalled CODESYS control runtime and visualization
- Supports PLCopen IEC-61131-3 standard programming languages
- Supports real-time industrial fieldbus protocols
- Supports Web HMI design and visualization for management

Introduction

SRP-M2i240 is a complete solution-ready-package that includes PC-based cabinet controller with a fanless high-performance Intel Core™ i processor, DIN rail, 128 GB SSD, 2MB MRAM, Microsoft Windows Embedded 7 Pro, and CODESYS control runtime and visualization. Advantech developed its SRP-M2i240 solution to serve as a single integrated interface for conducting real-time machine control. Compliant with the IEC 61161-3 international standard, SRP-M2i240 supports object-oriented programming (OOP), allowing users to effectively reduce development time. Moreover, by enabling dual fieldbus data acquisition (PROFINET, EtherCAT, EtherNet/IP, CANopen, and Modbus TCP/RTU), SRP-M2i240 provides a cost-effective tool for control, communication, and HMI functions in vertical industries.

Content of the Open Control Solution-Ready-Package for Industry 4.0

- PC-based panel controller
- iDoor CANopen
- 128GB SSD and 2MB MRAM
- Microsoft Windows Embedded 7 Pro 32 bit
- CODESYS Control Runtime with Softmotion + Vis. (Tar. & Web.)

Open Control Solution Specifications

One Open Controller for all Control Systems

- Supports the main fieldbus configurations and portable protocol stacks
  - PROFINET (Master)
  - EtherCAT(Master)
  - EtherNet/IP(Master)
  - CANopen
  - Modbus TCP(Server/Client)
  - Modbus RTU(Master)
- Flexible selection of object-oriented IEC 61131-3 (FBD, LD, IL, ST, SFC) standard programming languages
- Integrated Control Runtime & Visualization allows users to develop HMI screen in parallel to the IEC 61131-3 program
- Easy hardware configuration by iDoor technology implement for flexible I/O expansion and wireless communication options

High-Performance CPU for Real-Time Application Control

- Intrel Atom CPU both for entry and high performance requirements
- Optimized system BIOS setting guarantees the consistent CPU clock rate for real-time control

Visualized Control of Field Operations and Remote Mobile Clients

- Creates Visualized HMI on extended touch panel for on-site operation
- Supports brower-based(HTML5) visualization enabling remote operating on iOS/Android mobile devices
- The complete visualization screens can be deposited into a library and reused as IEC 61131-3 function blocks

Reliable Controller Design for Harsh Environments

- Includes MRAM for memory retained to secure record control data
- DIN-rain mounting fanless compact design for higher reliability and less maintenance effort
- Supports remote system status monitoring by WISE-PaaS/RMM
- Approved certifications: BSMI, CCC, CE, FCC Class A, UL
- Wide operating temperature

Configuration Options

Series	Operator Panel Controller
Part Number	SRP-M2i240-AH
Platform	TPC-5152T-633AE
BIOS	AMI UEFI
Operating System	Microsoft Windows Embeddd 7 Pro (32 bit)
Control Software	CODESYS V3.5 SP10 Control RTE with Softmotion & Visu. (Tar. & Web.)
CPU	6th Gen Intel® Core™ i3-6100U 2.30 GHz
Memory	8 GB DDR4 2133MHz SODIMM SDRAM (up to 16 GB)
Backup Memory	2MB MRAM
Display Size/ Type	15" XGA TFT LED LCD
Max. Resoution	1024 x 768
Touch Type	Projected capacitive
Light Transmission	90% ± 3%
Storage	128GB SSD
Mounting	Supports panel, stand (with optional kit), and VESA (with optional kit) mounting
Network (LAN)	3 x 10/100/1000 Base-T (2 x Intel® I210, 1 x Intel® I219)
Expension Slot	1 x Half-size PCIe;2 x Full-size mini PCIe
I/O	1 x RS-232, 1 x RS-232/422/485; 2 x USB 3.0, 2 x USB 2.0; 1 x Audio Line-Out; 1 x DisplayPort 1.4 Out
iDoor Expansion	1 x CANopen
Ingress Protection	IP66-rated front panel
Vibration Protection	With SSD: 3 Grms (5 ~ 500 Hz) (operating, random vibration)
Operating Temperature	0 ~ 55°C (32 ~ 131°F)
Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
Humidity	10 ~ 95% RH @ 40°C, non-condensing
Dimensions (W x D x H)	383.2 x 307.3 x 85.9 mm
Certification	BSMI, CCC, CE, FCC Class A, UL, EAC, 61010

Ordering Information

- **SRP-M2i240-AH**   TPC-5152T-633AE, RTE with Softmotion & Vis., CANopen, 8GB RAM, 128GB SSD, WES7P

Accessories

- **1702002600**   Power cable (US) 1.8 M
- **1702002605**   Power cable (EU) 1.8 M
- **1702031801**   Power cable (UK) 1.8 M
- **1700000596-11**   Power cable (China/Australia) 1.8 M
- **96PSA-A120W24T2**   Adapter 100 ~ 240V 120W 24V 5A
- **98R35000010**   Wi-Fi module 802.11 bgn/RT5390 1T1R with USB signal
- **98R35000000**   USB NFC/RFID module ADT-006
- **TPC-5000T-VMKE**   VESA mounting kit for TPC 5000 and 2000 Series
- **TPC-1000T-WMKE**   VESA and Wall mounting kit for TPC series from 10" to 17" panels