PAC 1100 Series

Unified Industrial Robot Controller with
Open Architecture for Customization

Main Features

- Support commonly-used industrial robots and general servo systems
- Support various coordinate systems
- Teach, replay and remote control mode
- Forward/backward teach inspection
- On-/off-line robot language editing
- D-H parameter function
- Kinetic parameters function

Product Overview

PAC 1100 series is a compact and open architecture industrial robot controller, providing a mandatory framework to control commonly-used industrial robots, such as articulated robot arms, 4-axis delta robots and SCARA robots. Supporting various coordination systems, storage of positions, on-/off-line robot language editing and different operation modes, PAC 1100 series covers basic requirement of a robot controller. With general analog commands to servo drivers and signals from quadrature encoders, PAC 1100 series supports robots with general servo systems and performs a full-closed loop servo control enabling fast and precise movement. Integrating robot kinematics, logic control and built-in HMI editor, PAC 1100 series realizes fast solution building up, ideally suited for robot manufacturers and users with highly customization requirements and research organization.

Specifications

System

- CPU: Intel® Atom™ N455 processor
- RAM: 4G
- 2 x Realtek 10/100M LAN
- 2 x USB 2.0 ports
- 1 x RS232 COM port
- 1 x VGA & 1 x specialized HMI connector
- 1 x PS/2 connector
- Windows CE 6.0 pre-installed

Robot Control Feature

- Full-closed loop servo motors control up to 4/8 axes
- Teach, replay and remote control mode
- Forward/backward teach inspection
- Support Joint-Space PTP, PTP and linear motion in Cartesian space, and arc CP command
- Various coordinate system support, joint coordinate system, the base coordinate system, the tool coordinate system, the world coordinate system, the workpiece coordinate system
- On-/off-line robot language editing
- Support D-H parameter function
- Kinematics parameter setting
- Simulation operation function
- Real-time Control Loop: 200μs

General I/O

- Terminal board: uncommitted DI/O up to 16-channel DI and 16-channel DO

Power Requirements

- DC input range: +24VDC input

Dimensions

- System: 296mm (H) x 75mm (W) x 160mm (D)

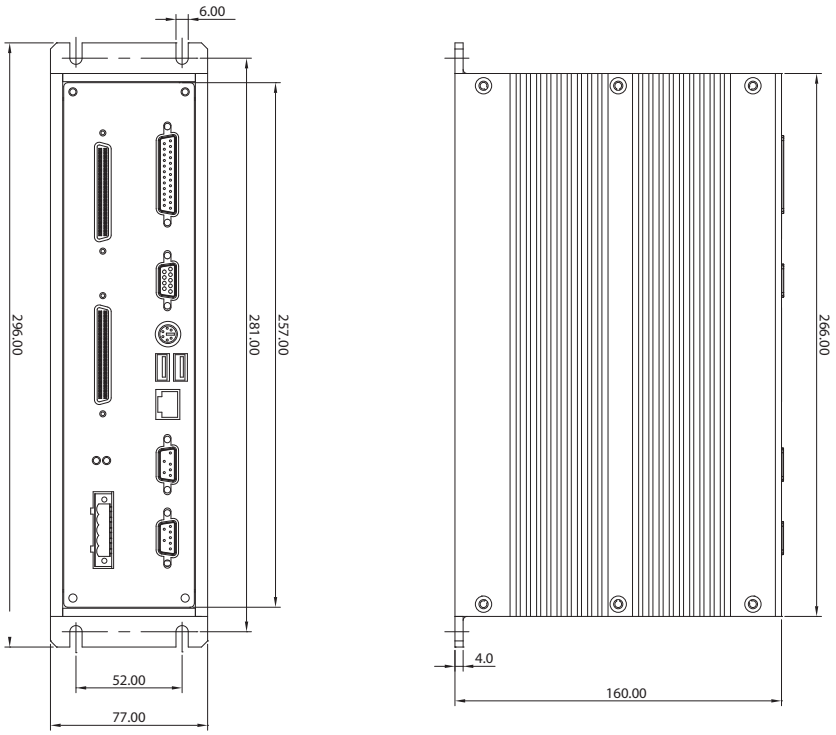
Environment

- Operating temperature: 0°C to 55°C
- Relative humidity: 5% to 90% (non-condensing)

Teach Pendant

- 6.5" color TFT backlit LCD display
- Resolution: 640 x 480
- Support touch panel function
- Function button: emergency stop, teaching start, pause, mode rotation (55 action buttons with numeric keys)
- DC input range: +24VDC input
- Dimensions: 392.8mm(H) x 226mm (W) x 82mm (D)

Dimension Drawing



Ordering Information

Robot Controller

- **PAC 1100-RAA (P/N: TBD)**
  Unified Industrial Robot Controller for 6-axis articulated robot arms
- **PAC 1100-RDL (P/N: TBD)**
  Unified Industrial Robot Controller for 4-axis delta robots
- **PAC 1100-RSC (P/N: TBD)**
  Unified Industrial Robot Controller for SCARA robots

Optional Accessories

- **GRP 2000-II (P/N: TBD)**
  6.5" industrial robot teach pendant