# 5-AXIS ARM ROBOT TRAINER



- Consists of one gripper and 5-axis vertical multi joints
- Absolute-type RVDT Position Sensor applied to each axis and requires no Limit switch
- High performance CPU enables real-time control of each axis
- PID gain tuning and real-time control
- Emergency switch on the robot controller and teaching pendant
- Control by USB and Ethernet interface
- Expandible 2-axis and digital or analog I/O port
- 3D graphic simulation and real-time connectivity with a real robot



## > EXPERIMENTS

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  - » Programming
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- » Basic experiments 1
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  - » Position determination methods
  - » How to use "Teach Pendant"
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  - » Accurate transfer through block repetitions
  - » Grip and transfer for a certain object
  - » Position transfer for a certain object
  - » Repetitive operation and simulation-linked transfer

# > CONFIGURATION

- Introduction to the System
  - » Basic Configuration
  - » Description of components
  - » Overview of Program
  - » Architecture

# 5-AXIS ARM ROBOT TRAINER

# **ED-7255**

# > SPECIFICATIONS

# ARM PROCESSOR

• CPU

» 666MHz, Min : 1ea

• NAND FLASH

» 128MByte: 1ea

NOR FLASH

» 1MByte: 1ea

DRAM

» 128MByte: 1ea

DPRAM

» 128k : 1ea

#### **DSP PROCESSOR**

• TMS320F2811

» 150MHz : 1ea

Motion Control

» Closed loop operation: 1ea

• Avaliable motor 8-axis

» CPLD : 1ea

Avaliable PWM Generation

» 8 axis : 1ea

• Absolute encoder counter

» 8 channels : 1ea

### **DRIVER PACK**

Operating environment

» 24V, 120W Max: 8ea

#### **INTERFACE**

• USB

» USB 1.1 A-Type(Pendant) : 1ea
» USB 2.0 B-Type(Host PC) : 1ea

• Ethernet

» 1oBase-T: 1ea

• RTC

» Real Time Clock: 1ea

State LED

» Alarm, Start/stop: 3ea

Character LCD

» 20 X 2 : 1ea

• Digital Input

» o~24V : 8ea

• Digital output

» o~24V : 8ea

Analog Input

» o~1oV : 4ea

Analog output

» o~1oV : 4ea

Relay Output

» SC, OC: 4ea

#### **ROBOT BODY**

Width: 280mm
Depth: 280mm
Height: Max. 786mm
Weight: 12.7kg
Operating Part

Link Number	Operating Range	Link Length	Weight
No. o(Base)	0	8omm	5.9kg
No. 1	-170~+170°	107mm	3.4kg
No. 2	-30~+94°	230mm	3.3kg
No. 3	-0~+130°	230mm	1.9kg
No. 4	-110~+110°	omm	o.6kg
No. 5	-110~+110°	omm	0.05kg
No. 6(Gripper)	o ~ 8omm (Rubber Pad)	139mm	0.35kg

#### **TEACH PENDANT**

• Display: 20 x 2 Character LCD

• Interface : USB 1.1

• Key: 37 user key(Emergency switch included)

### **ROBOT CONTROLLER DIMENSION**

Width: 250mmDepth: 309mmHeight: 88.1mmWeight: 3.8kg

#### **TEACH PENDANT DIMENSION**

Width: 138mmDepth: 190mmHeight: 40mmWeight: 0.55kg

#### **SIMULATOR ENVIRONMENT**

• CPU : Pentium IV 2GHz or higher

• Memory : Above 512MB

• Operating System : Windows XP

• Graphic Card

» 3D accelerated graphic card

# **ACCESSORIES**

• AC Power Cord

• USB Cable

• Controller Connection Cable

• Teach Pendant Cable

• RJ-45 Cable

Software and User Manual