

CPE-ST20P

Solar Tracking Control Trainer



FEATURES

- Miniaturized solar tracking system with a PLC controller
- Five solar simulation lamps installed on the support fixture
- 2-axis actuator control along with the sensors for solar tracking practices
- Real-time control according to the intensity of radiation and positional changes of a solar source
- Position control software designed for PC interface
- Lockable casters for convenient relocation of the training system

INTRODUCTION

The CPE-ST20P is a hands-on solar tracking control trainer designed to help estimate the generation quantity in relation to solar altitude. The CPE-ST20P is the miniaturized solar tracking system with a programmable logic controller. The CPE-ST20P can control the motor and sensors through PC interface and also rotate in any directions (top/bottom/left/right) based on the 2-axis actuators.

EXPERIMENTAL CONTENTS

- Principles of solar tracking system
- PLC control through the D-SUB cable connection
- Solar cell tracking control

SPECIFICATIONS

Solar tracking controller	CPE-ST20P	<ul style="list-style-type: none"> • Programmable logic controller (GLOFA GM4) *Note: Other types of PLC can be customized • Power switch (halogen lamp ON/OFF) • Solar cell voltmeter • Analog input (CDS input, 8-channel) • ISP input • Limit input
Terminal box unit		<ul style="list-style-type: none"> • DC output (lamp and motor) • CDS sensor output • Motor control (horizontal vs. vertical) • Limit control (horizontal vs. vertical) • DC 24V input
Solar cell unit		<ul style="list-style-type: none"> • 10W solar cells (5W x 2ea) • 8-channel CDS input • DC geared motor
Support fixture		<ul style="list-style-type: none"> • Type: Arc type • Rotation: Vertical / horizontal • Equipped with simulation lamps (5ea)

STANDARD ACCESSORIES

- Power cord : 1ea
- Connection cable : 1set
- User's guide manual : 1ea