

GENERAL DESCRIPTION

Speed and Dependability

The Envirotrak III is a high speed (33 msec scan rate) micro-processor based controller, designed for fume hood, laboratory air flow, isolation and containment room control applications. The ENV III utilizes non-volatile memory (EEPROM) to maintain its programmed control strategies in the event of power loss.

Flexibility

The ENV-III has five analog inputs that can be configured for platinum RTD, Balco series temperature sensors, 0-5 volts DC, 4-20 mA DC or status contact inputs. Two additional contact inputs are available for either status monitoring or pulse inputs. The controller also provides two 24 Vac triac-switched outputs for start/stop, staging, pulse width modulation, floating control type actuator or alarms to the EMS. There are three analog outputs that can be configured for 0-15 Vdc or 4-20 mA DC.

Stand-Alone Operation

Depending on system requirements the ENV III can be networked or used as a stand-alone controller. The ENV III-RTC is equipped with a real-time clock for stand-alone time scheduling.

User-Defined Programming (UDP)

Programmable control is available in the ENV III, enhancing the stand-alone capability.

Local Operator Interfacing

This port allows connection of a handheld operator interface or a laptop PC to provide local access to the controller. This port is also used as the connection for the ENV-IS series Intelligent Sensor and the ENV-IAM Intelligent Alarm Module.



Laboratory Control Systems Inc.
2259 Scranton-Carbondale Hwy
Scranton, PA 18508

Tel: 570-487-2490
Fax: 570-487-2494
www.labcontrols.com

SPECIFICATIONS

MODEL NO. ENV III

ENV III (Part #006015), ENV III-RTC (with real-time clock)

AGENCY LISTING

UL-916 (Energy Management Equipment),
Complies with FCC Class "A" requirements.
Certification by Canadian Standards Association (CSA).

SCAN RATE

Scans all inputs, does all math and updates all outputs 30 times/sec (33 msec).

POINT CAPACITY

Maximum of 16 Loop, AO, and Mode Control points. 48 total points.

ANALOG INPUTS

Five, 12 bit resolution. Inputs are compatible with the following: 1000 Ohm Platinum Temperature Sensor: -40 to +240°F (-40 to +115°C), 1000 Ohm Balco Temperature Sensor: -28.6 to +240°F (-36.6 to +240°C), 0-5Vdc 4-20mA DC: externally powered. Analog input No. 5 is Vdc and mA DC only. Analog inputs are jumper selectable.

Model ENV III / ENV III-RTC

ENVIROTRAK III CONTROLLER

SPECIFICATIONS (cont.)

CONTACT INPUTS

Two for status or pulse monitoring of dry contacts. Maximum pulse rate is 5 Hz @ 40-60% duty cycle.

INTELLIGENT SENSOR & INTELLIGENT ALARM MODULE

The ENV III interfaces with the ENV-IS series Intelligent Sensor and the ENV-IAM Intelligent Alarm Module. These products do not require use of any of the 5 analog inputs provided by the controller. For additional information, refer to the ENV-IS and ENV-IAM data sheets.

DIGITAL OUTPUTS

Two 24Vac triac-switched digital outputs. Pilot Duty: maximum 12VA each, 24 Vac only.

ANALOG OUTPUTS

Three configured as follows: - A01: 12 bit resolution, 0-15 Vdc: minimum load resistance 500 Ohms for output range 0-10 Vdc, 2K Ohms for greater than 10 Vdc.

4-20mA DC: load must be 800 Ohms or less.

A02 and A03: 8 bit resolution,

0-15 Vdc: same load limits as above.

4-20mA DC: same load limits as above.

Analog outputs are jumper selectable.

COMMUNICATIONS

Two wire, RS-485 data trunk.

TRUNK WIRE

Under 1000' - Belden #9501, Up to 4000' - Alpha #9823C, Plenum & riser under 1000' - Belden #89503. Plenum & riser up to 4000' - Belden #89182.

I/O CONNECTION TYPES

1/4" quick-connect (spade lug) terminals.

TREND

2 analog points, 48 readings for each point. User-programmable interval time. Trend MAX, MIN, AVG, or Value; trend rollover or stop when full.

TIME-OF-DAY & BACKUP SCHEDULE

Assignable to any schedule point. Two schedule, 10 days, 6 events per day.

REAL-TIME CLOCK BACKUP

6 hour minimum rechargeable capacitor for onboard real-time clock. 24 hour typical.

USER-DEFINED PROGRAMMING

100 lines of UDP code available. 10 UDPs maximum.

OPERATING ENVIRONMENT

32 to 122°F (0 to 50°C), 5 to 85% RH (non-condensing).

POWER REQUIREMENTS

Controller only: 24V, 50/60 Hz, 16VA. Controller and loads: 24V, 50/60Hz, 40VA max. (12 VA per triac).

WEIGHT Net: 1 lb.

SHIPPING WEIGHT 1 lb., 11 oz.



Laboratory Control Systems Inc.
2259 Scranton-Carbondale Hwy
Scranton, PA 18508

Tel: 570-487-2490
Fax: 570-487-2494
www.labcontrols.com

Model ENV III / ENV III-RTC

ENVIROTRAK III CONTROLLER