S a v e   T i m e   •   S a v e   M o n e y   •   I m p r o v e   P e r f o r m a n c e

■ Introduction

ENVIRCO®'s ACC7030, ACC7031, and ACC7032 control consoles intelligently monitor and control cleanroom and facility environments. The consoles provide communication (MODBUS-RTU) platform), unit control, and system monitoring in one easy-to-use package. Additionally, the ACC7031 and ACC7032 come standard with a remote alarm trigger and remote set-back (shut-down), and the ACC7032 provides Environment Monitoring with up to six analog sensors that can be monitored and data-logged.

The ACC7030 Series consoles support fan control networks consisting of up to 100 FFUs organized in up to eight groups. Plug-and-Play, the consoles are field configurable to match your facility needs.

The ACC7030, ACC7031, and ACC7032 come standard with a panel box, universal SMPS, and out-of-the-box graphic console controls. The consoles can be supplied in an off-white steel panel box with a 3.5" depth to easily mount on a wall (ACCPNL00 option). Remote access to screen console (ACC-ETH option) is also available.

■ Functions/Features

» Up to 100 FFUs and eight groups per system
» Alarm for error (dry contact output, standby/setback input, and emergency shutdown on ACC7031/ACC7032 units)
» Six analog (4-20mA) sensors (ACC7032 only)
» Seven-day clock/calendar
» Unit and facility/group speed adjustment
» Monitor/alarm error types
  » Communication error with the node
  » Pressure switch fault (AC)
  » RPM low or high limit exceeded (EC)
» Menu-driven configuration options
» Three levels of user control: View, User, and Master

■ Environment

» Panel-mounted console
» Operational temperature: 0 to 50°C (32 to 122°F)
» Storage temperature: -20 to 60°C (-4 to 140°F)
» Relative humidity (RH): 5% to 95% (non-condensing)

■ Options

» ACCPNL00 - Enclosure
» ACC-ETH - Remote access Ethernet

■ Specifications

Power Supply
» Input voltage: 24 VDC
» Maximum current consumption: 240mA @ 24V

Display Screen
» TFT, LCD display, white LED backlit
» 3.5" viewing area
» 320 x 240 display resolution

Keyboard
» Virtual keyboard when data entry required

Communication
» One isolated RS485 serial port (PORT 1)
» -7 to +12 VDC differential maximum voltage limits
» 9600 baud rate
» Supports up to 100 MODBUS addresses
» Twisted pair (cat5e) cable type

Remote I/O (ACC7031 and ACC7032 only)
» Alarm output - dry contact
» Standby/shut-down input - 24VDC input

■ Enclosure (ACPNL00 Option)

» Durable 18-gauge cold rolled steel construction
» Mounts on wall surface
» Captured hinge cover design for easy access
» Off-white, textured, powder-coated, and corrosion-resistant
» Key latch for positive closure and security
» Raised mounting rails create clean wiring channel
» Dimensions: 7" W x 11" H x 3 5/16" D
» RJ45 coupler included for easy FFU daisy chain
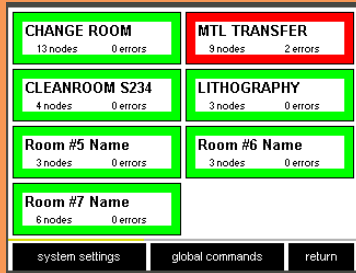» Din Rail power supply included (100-240 VAC input)

S a v e T i m e • S a v e M o n e y • I m p r o v e P e r f o r m a n c e

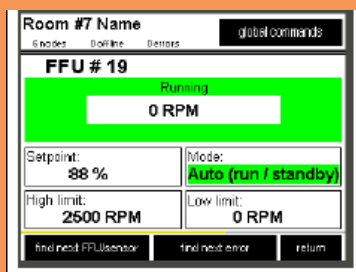### Example Screens - ACC7030/ACC7031

■ **Main Screen**

The main screen shows the assigned groups and their status (up to eight groups). Each group has the identified number of fans and identified errors.
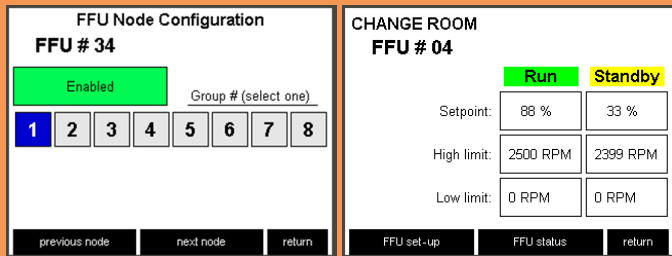

■ **Fan/Unit Control**

ECM (DC Brushless - ACMXXX) fan control screen shows the fan number, status of the fan, and group assignment. The fan's current setpoint (0-100%) and RPM value are shown (along with high/low

limits). Mode: setpoint and limits can be set by touching the relevant box. AC fan control screen is the same without the RPM monitor.
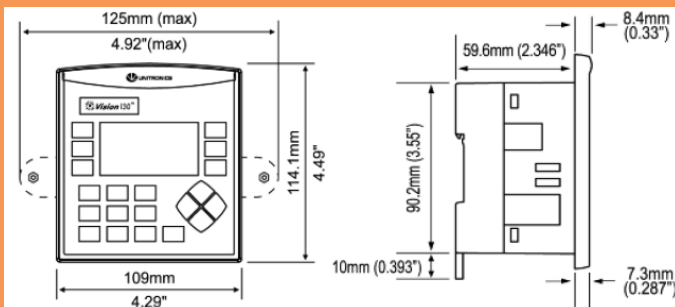
■ **Fan/Unit Setup Screen**

FFU nodes are assigned easily, and limits/setpoints are assigned per the screen shot examples below.
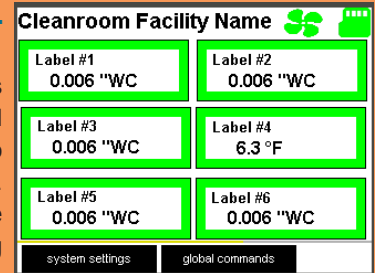

Mechanical Dimensions
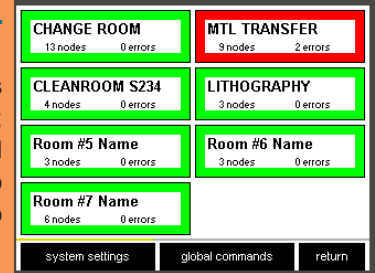

Example Screens - ACC7032

■ **Main Screen - Sensor Monitoring**

The main screen shows the sensor status and measurements - key to cleanroom performance. Up to six sensors are visible, and color coding quickly identifies if the rooms are within acceptable range. The fan-blade provides FFU status (color code) and access to the facility group screen. The data file icon demonstrates the status of the datalog process. System and global settings are also easily accessible from this point.

■ **Facility Screen - FFU Monitoring**

The facility screen shows the group (FFU) status; it is color-coded and provides summary group information and access to the individual FFUs.

■ **Fan/Unit Screen and Setup Screens**

FFU node information and setup screens are shown below. Easy to navigate, the user manual provides step-by-step details on setting up your console. FFUs are easily assigned, and limits/setpoints are assigned per the screen shot examples shown.