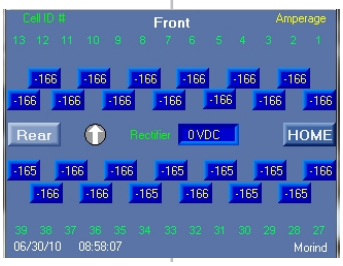
# New Generation Anode Monitor

## PRODUCT DATA SHEET

The New Generation Anode Monitor is designed to measure & visualize the electric current flowing through each Membrane Electrode (ME) Cell in the E-coat tank. This information is viewed on the color display of the Unitronics PLC and also remotely on the lab PC via Ethernet. UFS provides a basic E-coat plan view template using a 3rd party PLC visualization software (runtime license). Visualization provides quick performance feedback for the process & maintenance personnel. So downtime and other types of trouble can be minimized by the advance notice it provides.



Sample of PLC screen


Typical view of panel


Interior view of panel


Hall Effect Current Sensor with its pigtail connection

## Features

- Current sensing is performed by a 100 amp Hall Effect sensor that requires a 5 V DC input.
- Rectifier DC voltage is reported to the PLC with a 0 - 10 V signal.
- The panel shown on the back can handle up to 32 ME Cells. Note the PLC nor power switch is shown on the panel drawing.
- A remote panel is required if there are more than 32 ME Cells. The remote panel(s) communicates with the PLC via CAN bus.
- Host (with PLC) panel is NEMA 12 metal enclosure box with power switch. Remote panels (without PLCs) have a power switch plus a “power on” lamp.
- Hall Effect sensors slip over existing wire with a 22 mm (0.8 inch) ID for easy installation. UFS provides an 30 cm (18 in) pigtail.

## Options

- Ask for the 200 amp current sensor if C or box cells are used.
- Customized visualization program (ME Cells or UF System)

## Visualization

- Current is shown as a number plus a red, yellow, or green color to quickly tell which ones are over, under, or within standard parameters
- SD card records data every 0.5 sec, this can be downloaded into an Excel spread to capture history.

## Properties

- 120 VAC 1 phase (1 Amp) power for each Host & Remote Panel(s)
- 24 V power supply for PLC
- 5 V power supply for Hall Effect sensors
- Ethernet port (built into PLC)
- 5.7 inch color touch-screen display
- SC card slot (built into the PLC)

## Typical Configuration

Host panel is installed main side of the E-coat tank. Remote panel is located other side of the tank. This approach minimizes the cable runs to the current sensors. Note: 3 conductor PVC jacketed cable (AWG 22: black, red, white) is not provided nor is conduit, fittings, etc to carry the signal cable to and from the current sensors to the panel(s). Also not include is CAN bus cable.

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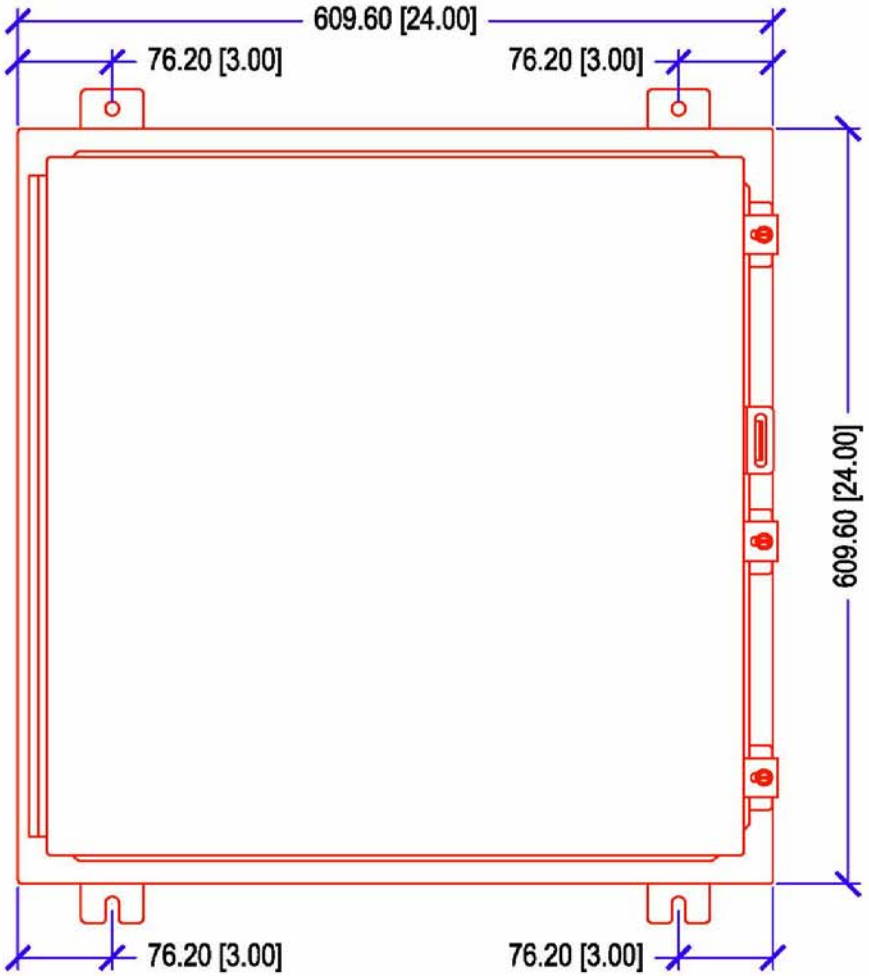
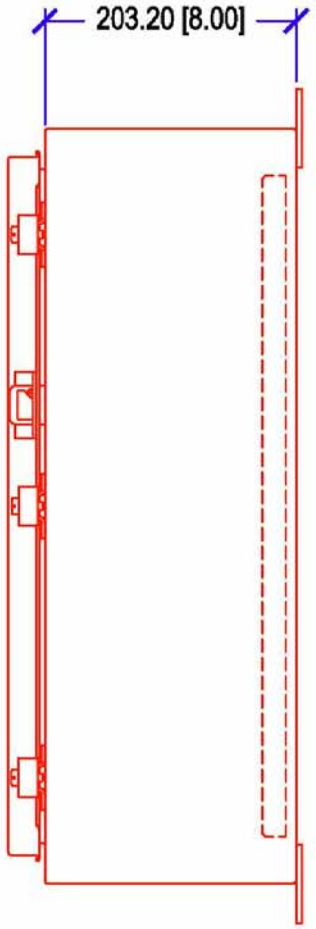



FRONT VIEW




SIDE VIEW

**NOTE:**
Internal Instruments Not Shown
Panels made from 12 Ga. Steel.

# NEW GENERATION ANODE MONITOR

