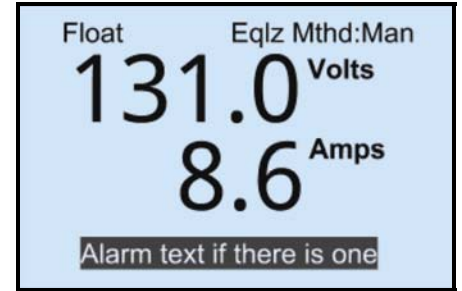# ATevo Series Battery Charger
AC INPUT METERING FEATURE

STANDARD (DC) METERING

All ATevo Series microprocessor-controlled battery chargers feature built-in metering of *output* voltage (Vdc) and current (Adc), as standard. For local (visual) monitoring, the dc output values are shown on the Home Screen of the front panel Liquid Crystal Display (LCD). The dc metering display is accurate to 0.5%.
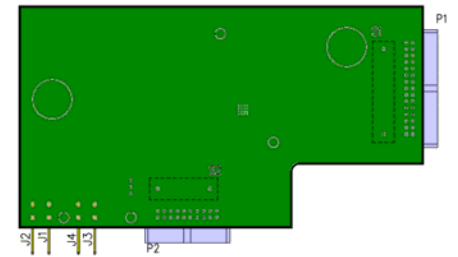
See Sections 3.2.1 and 5.1.1, of the ATevo standard O&SI for further details. These digital dc output values are also available for remote monitoring, if the optional ATevo Communication feature is supplied.

ATevo HOME SCREEN

AC METERING HARDWARE

An optional *ac input* metering feature (ordering p/n EJ5303-##) is available for all ATevo charger models and input feature voltages. The option consists of an ac metering pc board (A28), plus one (1) or two (2) current transformers (CT#). When supplied, the ac metering pc board (A28) is piggy-backed on top of the Main Control PC Board (A1). The A28 board, along with the ATevo firmware, calculates input voltage (**Vac**) via signals from the power isolation transformer secondary taps (T1-X#). The A28 board is wired to current transformer(s), which lie between the ac input circuit breaker (CB1) and the power isolation transformer (T1). This allows the ATevo to measure input current (**Aac**).

**AC METERING MODULE
PC BOARD (A28)**

The ac metering is accurate to **1%**, based on the range of the current transformer. Line-to-line voltage and line current are measured using the RMS method. Line frequency is also measured and displayed. The ATevo ac metering option was introduced in firmware v2.6.0.

ACCESSING AC METERING

1) Access the ac metering values via the following buttons and screens:

    DISPLAY MODE / **AC Meter**
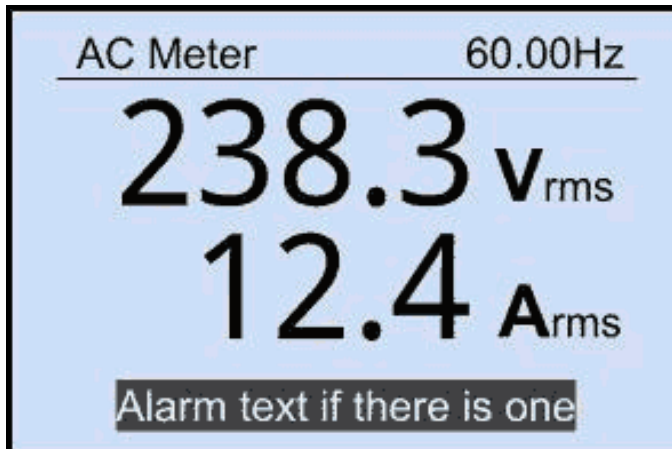
2) The ac metering screen will remain the active top-level display, until a new status is selected.
3) Press **ESC** to revert *back* to the Home Screen (**Vdc** / **Adc**).
4) See Sheet 2 of 2 for sample front panel 1PH & 3PH ac metering displays.
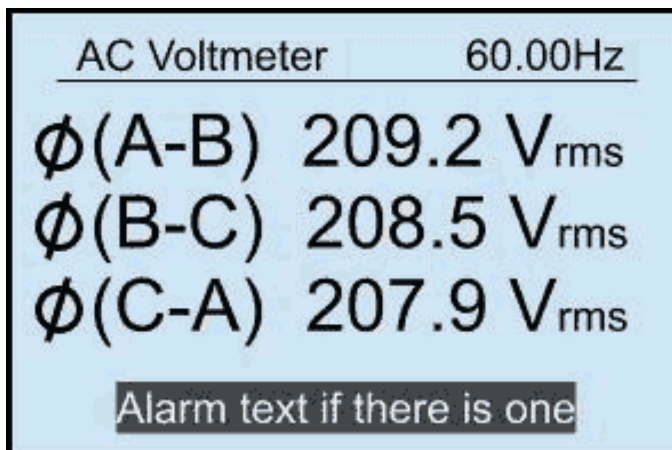
REMOTE AC METERING

The ac metering values (Vac, Aac & Hz) are also available for *remote* monitoring. They can be accessed via DNP3 Level 2 and Modbus protocols, if the optional ATevo Communication feature is supplied. Refer to the ATevo Communications Module *Operating Instructions* (**JA0102-54**) for details.

SAMPLE DISPLAYS

single phase
ac metering

AC Meter	60.00Hz
$238.3\,V_{rms}$	
$12.4\,A_{rms}$	
Alarm text if there is one	

three phase
ac voltage metering

AC Voltmeter	60.00Hz
ϕ(A-B)	$209.2\,V_{rms}$
ϕ(B-C)	$208.5\,V_{rms}$
ϕ(C-A)	$207.9\,V_{rms}$
Alarm text if there is one	

three phase
ac current metering

AC Ammeter	
ϕA	$8.5\,A_{rms}$
ϕB	$8.3\,A_{rms}$
ϕC	$8.5\,A_{rms}$
Alarm text if there is one	