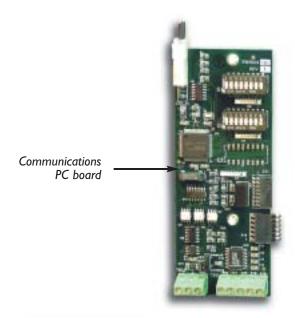
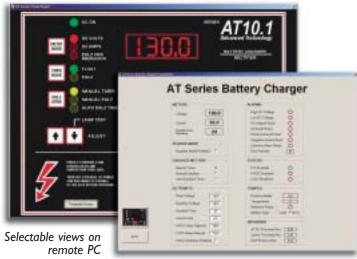


# **AT SERIES COMMUNICATIONS**

# DNP/MODBUS COMMUNICATIONS FOR THE AT 10.1 AND AT 30 SERIES BATTERY CHARGERS





The AT Communications option allows the user to remotely monitor and control the AT Series Battery Charger over a serial connection.

Supports DNP3 Level 2 and Modbus protocols over RS-232 or RS-485 half-duplex.

The system can be used with a modem for telephone communications.

Everything that the user can do at the charger's front panel display is accessible remotely.

SCADA (Supervisory Control And Data Acquisitions) systems will be able to control, monitor and log the events of the battery charger.



**Delivering quality** 



## **List of Accessible Parameters**

#### Meters

- Voltage
- Current
- Equalize Time Remaining
- Battery Temperature\*

## Setpoints

- Float Voltage
- Equalize Voltage
- Equalize Time
- · Current Limit
- · High DC Voltage
- Low DC Voltage
- · High DC Shutdown Enable

#### Status

- Temperature Probe Installed\*
- Forced Load Share Enabled\*

# ☐ Charger Mode

- Float
- Equalize

## Equalize Method

- Manual
- Timer
- Auto

#### Alarms

- High DC Voltage
- Low DC Voltage
- DC Output Failure
- AC Input Failure
- Positive Ground Fault
- Negative Ground Fault
- High DC Voltage Shutdown
- · Common Alarm Relay
- Error Number Code Self Diagnostics

<sup>\*</sup>These items are not accessible from front panel of battery charger.

| ORDERING INFORMATION |  |
|----------------------|--|
| Part Number          |  |
| EJ5037-01            |  |
| EJ5037-02            |  |
| EJ5037-03            |  |
| EJ5037-04            |  |
| PM5005-00            |  |
|                      |  |
| EH5026-00            |  |
| EH5026-01            |  |
| EH5026-02            |  |
|                      |  |

# **Communications Kit Includes:**

- A12 Communications board
- A14 Power supply for specific charger voltage rating
- AT Series Remote Application Software for PC
- Operation manual

# Typical Applications for SCADA Systems using DNP or MODBUS Protocols.

Figure I. RS-485 Half-Duplex Multi-Drop

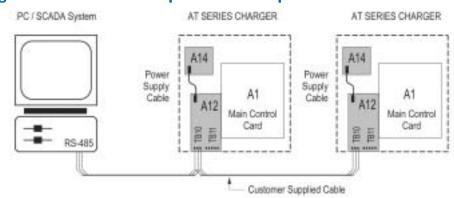
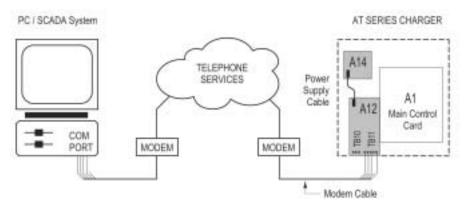


Figure 2. standard RS-232 connection with or without hardware handshaking



Figure 3. Remote communications using a modem



**Delivering quality** 



<sup>\*\*</sup>This equipment is industry standard. It may be purchased thru ALCAD or acquired from a local supplier. Contact ALCAD for specific equipment requirements.