

SENTRY INSTALLATION CHECKLIST

Standard Mode: S2E (Serial to Ethernet)

1. PREPARING FOR INSTALLATION

- Check the package, by default, it includes a Sentry unit, IR fused leads (3+), a set of plugs, one plug with temperature sensor (s), a power adapter if the unit is not powered by battery bank
- Current sensor if ordered, check the window size for your application
- Prepare fused leads for sampling if not ordered from BatteryDAQ
- Calculate and prepare wire/cable from Sentry unit to battery terminals. (20 AWG Multi-conductor cable is recommended.) Prepare ferrules for correct wire gauge
- Active Ethernet port(s) for the site, close to each battery cabinet/bank
Power outlet(s) if the unit is powered by AC/DC adapter. (10W each unit, 100-240VAC)
- Choose computer(s) with Windows 7, 8 or 10 pro 64-bit OS. (XP is no longer supported.)

2. SOFTWARE

- Install Microsoft SQL Express 2008 or 2012 database. (64-bit. All goes with default. Windows authentication. Add Current User)
- Install Battery Analyzer and DAS software. (setup.exe, run as administrator)
- Run Battery Analyzer, add equipment, set IP and MID to a battery string in BatteryDAQ's lab
- Record IR baseline, close/restart Battery Analyzer to verify database installation
- Install virtual serial port driver (NNDKVComm.exe) on the computer for DAS software
- With a Sentry unit connected to Ethernet, set static IP with IPSetup.exe, create virtual serial port, test with DAS software until you get data/temperature to Battery Analyzer software

3. INSTALLATION/WIRING

- Disconnect battery string from UPS
- Locate/secure the Sentry unit close to batteries such as the top of battery cabinet
- Label each battery with number, #1 is from the positive (+) bus, go with circuit connection sequence.
- Install O-ring fused leads or tabs to batteries. (UPS batteries perhaps have pre-installed tabs)
- Wire from Sentry unit to leads, organize cable professionally to ensure long-term reliability
- Power on Sentry unit, with HMI to check voltage and verify wiring connections
- Check current zero point, adjust current offset (calibration setting) with HMI if needed
- Connect battery string back to UPS

4. COMMISSION

- Verify battery string voltage, ambient/pilot temperature
- Verify Internal Resistance value, it shall be in the range as specified for the battery type/model. The first set of IR data may take some time. (about 20 minutes for 40 batteries)
- Check alarm settings for the unit and PC software, export a set of data, fill commission form

This checklist does not include tools, procedures and safety cautions for battery installation.

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- Calculate and prepare wire/cable from Sentry unit to battery terminals. (20 AWG Multi-conductor cable is recommended.) Prepare ferrules for correct wire gauge
- Active Ethernet/Internet port(s) for the site, close to each battery cabinet/bank
Power outlet(s) if the unit is powered by AC/DC adapter. (10W each unit, 100-240VAC)
- Choose computer(s) with Windows 7, 8 or 10 pro 64-bit OS. (XP is no longer supported.)

2. SOFTWARE

- Install Microsoft SQL express 2008 or 2012 database. (64-bit. All goes with default. Windows authentication. Add Current User)
- Install Battery Analyzer software. (setup.exe, run as administrator)
- Run Battery Analyzer, add equipment, set IP and MID to a remote battery string in BatteryDAQ's lab
- Record IR baseline, close/restart Battery Analyzer to verify database installation
- With a Sentry unit connected to Ethernet/Internet, set correct server IP and MID to Battery Analyzer software until you get data/temperature. Access data from anywhere with internet.

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