

STEM FTP Data Transmission Specification

Note 1: Files must be uploaded in chronological order, meaning oldest file should be uploaded first then the newer files must be uploaded in order

Note 2: Each uploaded file to the FTP server must have a unique file name, the file name format should follow {Powertrack SiteID}_{YYYYMMddHHmm}.csv

Quick How to:

1. Review the transmission format below
2. Configure your SCADA system to format your data as shown by the transmission format below
3. Create a mapping file leaving the {powertrack hardware HID section blank} by utilizing the template provided [here](#).
4. Submit your transmission file and mapping file and site one lines (or site device list) to Stem for review, this will allow Stem to assign a siteID and generate the necessary HIDs for your mapping file.
5. Submit your finalized mapping file to Stem
6. Once validation is completed you will obtain the FTP server credentials to point your system to Stem servers.
7. You may now begin sending data transmissions to the Stem system
8. Upon validating all data is mapped correctly and the proper scaling is applied your site may move to the ASC process where the modeling and advanced configuration information will be validated.

Transmission Format

The file transmitted should be in a csv format (comma separated) where the first row is considered the header row indicating the full tag name in each column, the second row should start with the timestamp for the data and each consecutive column shall contain the actual data for the indicating tag.

Timestamp format: YYYY-MM-dd HH:mm:ss

Timestamp timezone: UTC (all times should be reported with 0 offset and shall not observe daylight savings time)

File Naming: Each uploaded file to the FTP server must have a unique file name, the file name format should follow {Powertrack SiteID}_{YYYYMMdd HHmm}.csv

Note 1: Please note all timestamps indicate the the beginning of the interval for data

Note 2: If the same timestamp is encountered multiple times the initial data values will be the effective values all consecutive instances will be ignored as duplicate data.

Note 3: A sampling interval shall contain all points that fall within the interval. Submitting individual tag timestamps will result in unaligned data within the PowerTrack system when viewing raw data.

Note 4: In order to escape comma (,) for a data value please simply wrap the entry with "" for example: "Identifier,4".

Note 5: At this time Stem supports a minimum frequency of 1 minutes for critical and a minimum frequency of 5 minutes for non-critical data, please note data data sets exceeding 300 points may be subject to additional fees, please contact your sales person for additional information. If you are interested in sending higher frequency data please consult with your sales person regarding options.

A sample file is available for download [here](#).

Online URL: <https://kb.alsoenergy.com/article.php?id=1712>