

WEM-IO XML Report Field Structure

By: Tech Support
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Purpose: This document provides greater understanding of key fields contained in the reports. Please contact technical support if you require additional details at support@energytracking.com

Sample XML Island:

```
- <XML id="meter">
- <DATA>
  <Email_Sch>data@imetering.com</Email_Sch>
  <Email_Alarm />
  <SRL_NUM>9876543210123456</SRL_NUM>
  <METER_ID>12345678901234567890</METER_ID>
  <MAC>00:40:9D:39:87:8D</MAC>
  <METER_ADDR>Your Location</METER_ADDR>
  <METER_TIME>07/13/09 00:35 Monday</METER_TIME>
  <IP>192.168.4.91</IP>
  <TSF>1</TSF>
  <MODEL>WEM-IO</MODEL>
  <VER>071209_WEM-IO_H</VER>
- <SB>
  <TS>07/13/2009 00:35:00</TS>
  <C0>953</C0>
  <C1>3084</C1>
  <C2>2258</C2>
  <C3>3955</C3>
</SB>
- <LPD>
  <TS>07/13/2009 00:35:00</TS>
  <C0>0</C0>
  <C1>1</C1>
  <C2>0</C2>
  <C3>1</C3>
</LPD>
  <R1>2</R1>
  <R2>1</R2>
  <DC>2</DC>
  <TT>2</TT>
  <IT>1</IT>
  <CB>0</CB>
  <TO>0</TO>
  <ZONE_ID>07836-991</ZONE_ID>
- <REC id="35">
  <TS>07/12/2009 00:35:00</TS>
  <C0>0</C0>
  <C1>0</C1>
  <C2>0</C2>
  <C3>0</C3>
</REC>
```

XML Field Reporting Tag Elements:

Tag	Description
<XML id = "meter">	XML Starting Tag
<DATA>	DATA Starting Tag
<Email_Sch>	Primary Email Recipient
<Email_Alarm>	Email CC:
<SRL_NUM> 9876543210123456</SRL_NUM>	Device Serial Number
<METER_ID> 12345678901234567890 </METER_ID>	Device Identification Number
<METER_ADDR>WEM Location</METER_ADDR>	Device Address
<METER_TIME>07/13/09 00:35 Monday</METER_TIME>	Device Time
<IP>192.168.4.91</IP>	Device's IP Address
<TSF>1</TSF>	Time Stamp Format
<MODEL>WEM-IO</MODEL>	Product Model
<VER> 071409_WEM-IO_A</VER>	Firmware Version
<SB>	Summation Counts for ALL Channels
<LPD>	Latest Interval Load Profile Data with Relay 1 & 2 Status
<R1>	Relay 1 Status where 2 – 'OFF' 1 – 'ON'
<R2>	Relay 2 Status where 2 – 'OFF' 1 – 'ON'
<DC>	Duty-Cycling Status where 2 – 'OFF' 1 – 'ON'
<TT>	Threshold Triggering Status where 2 – 'OFF' 1 – 'ON'
<IT>	Input Triggering Status where 2 – 'OFF' 1 – 'ON'
<CB>	Call Back Time in Minutes provided by Web Services
<TO>	Time Out value sent by Web Services
<ZONE_ID>	User defined field in WEM-IO
<REC id = "xxx">	Historical Load Profile Data with Relay States

<TSF> - Time Stamp Format.

Values: 1 – US format. 2 – UK format.

<SB> - Summation Counts:

The WEPM will report the total pulse counts for each channel.

<TS> - Date Time Stamp

<LPD> - Latest load profile interval. This is the last load profile interval that was logged before the report was sent.

<REC id="xxx"> Historical load profile data where the id = Hours X 60 + Minutes.

<C0> - Channel 1 pulse counts

<C1> - Channel 2 pulse counts

<C2> - Channel 3 – Relay 1 Status (where 1 is 'ON' and 0 is 'OFF')

<C3> - Channel 4 – Relay 2 Status (where 1 is 'ON' and 0 is 'OFF')

<TO> - Time Out. This is an optional value (in minutes) provided by the SOAP Web Services Server to inform the WEM-IO to disengage relays after x minutes. This field is used as a precaution in the event that the WEM-IO has triggered relays and subsequently network access has failed.

IIS Web Service Interface:

The WEM-IO is looking for certain key tag elements from IIS web services once data has been posted.

1. <RC>X</RC> (where the RC abbreviation stands for 'Relay Control')

Where the value X is:

X = 0 - Do nothing.
X = 1 - Turn Relay 1 & 2 Off.
X = 10 - Turn Relay 1 OFF.
X = 11 - Turn Relay 1 ON.
X = 20 - Turn Relay 2 OFF.
X = 21 - Turn Relay 2 ON.
X = 33 - Turn Relay 1 & 2 ON.

2. <CB>X</CB> (where the CB abbreviation stands for 'Call Back')

Where the value (in minutes) X is:

X must be > 0 and < 99999.

3. <TO>X</TO> (where the TO abbreviation stands for 'Time Out' if communications fail (in minutes).)

Where the value (in minutes) X is:

X must be > 0 and < 99999.

Note: 'TO' value should be greater than the access periodicity else the relays will be prematurely disabled.

4. <ME>X</ME> (where the ME abbreviation stands for 'Module Engagement')

WARNING! Only one module may be active at any one time.

Where the value X is:

X = 0 - Do nothing.

X = 1 - Turn All Modules Off.

X = 10 - Turn Relay 1 & 2 OFF and Disable Duty Cycling.

X = 11 - Enable Duty Cycling.

X = 20 - Turn Relay 1 & 2 OFF and Disable Threshold Triggering.

X = 21 - Enable Threshold Triggering.

X = 30 - Turn Relay 1 & 2 OFF and Disable Pulse Input Threshold Triggering.

X = 31 - Enable Pulse Input Threshold Triggering.

5. `<DS>X</DS>` (where the DS abbreviation stands for 'Data Saved')

Where the value X is:

X = 0 - Data not saved to the database.

X = 1 - Data was saved to the database.

A typical response from the IIS Web Server would be:

`<RC>0</RC><TO>0</TO><ME>0</ME><DS>1</DS>`

Note: Responses are case sensitive and must be in upper case.

Direct Relay Control via Local Network Access:

If direct access is available, then the following can be executed.

<http://xxx.xxx.xxx.xxx/R1ON.htm>

- Turn 'ON' Relay 1.

<http://xxx.xxx.xxx.xxx/R2ON.htm>

- Turn 'ON' Relay 2.

<http://xxx.xxx.xxx.xxx/R1OFF.htm>

- Turn 'OFF' Relay 1.

<http://xxx.xxx.xxx.xxx/R2OFF.htm>

- Turn 'OFF' Relay 2.