

## Insteon - Feature #930

### iMeter Power Usage

12/17/2014 10:56 PM - Luke Murphey

<b>Status:</b>	New	<b>Start date:</b>	12/17/2014
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Luke Murphey	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	0.10		
<b>Description</b>			
See <a href="https://github.com/automategreen/home-controller/blob/master/lib/Insteon/Meter.js">https://github.com/automategreen/home-controller/blob/master/lib/Insteon/Meter.js</a>			
<b>Related issues:</b>			
Related to Insteon Control - Feature #878: Allow controlling of Insteon in Sp...			<b>Closed</b> <b>12/19/2015</b>

### History

#### #1 - 12/27/2014 07:30 AM - Luke Murphey

- Target version set to 0.6

#### #2 - 04/11/2015 12:39 AM - Luke Murphey

- Target version changed from 0.6 to 0.9

#### #3 - 06/04/2015 05:48 PM - Luke Murphey

- File eve-energy-device-app-icons.jpg added



Consumption



Switch On/Off



Gain Insights



#### #4 - 12/19/2015 04:15 AM - Luke Murphey

- Related to Feature #878: Allow controlling of Insteon in Splunk added

#### #5 - 12/19/2015 07:03 PM - Luke Murphey

See also:

- <http://cache.insteon.com/developer/2448A2dev-042011-en.pdf>
- <http://cache.insteon.com/developer/2423A1dev-072013-en.pdf>

Basically, it looks like the iMeter needs to get a 00 82 command in order to send power readings.

#### #6 - 12/22/2015 07:30 AM - Luke Murphey

<http://cache.insteon.com/developer/2423A1dev-072013-en.pdf>

bytes 7 & 8 are power

bytes 9-12 are accumulated energy

```
IntEnergy = 256*256*256*Data9 + 256*256*Data10 + 256*Data11 + Data12;
```

```
if(Data9 < 254)
    AccumEnergy = IntEnergy * 65535.0 / (1000 * 60.0 * 60.0 * 60.0);
else
    AccumEnergy = 0.0;
```

```
IntPwr = (Data7 << 8) | Data8;
```

```
*pwr = (double)IntPwr;
```

```
if(*pwr > 32767.0)
    *pwr = *pwr - 65535.0;
```

#### #7 - 02/02/2016 03:15 AM - Luke Murphey

- Target version changed from 0.9 to 0.10

#### #8 - 04/17/2017 08:17 PM - Luke Murphey

See also:

<https://github.com/openhab/openhab1-addons/blob/0d13cc0761633efd7998f89bca31e6887403490a/bundles/org.openhab.binding.insteonplm/src/main/java/org/openhab/binding/insteonplm/internal/device/MessageHandler.java>

```
public void handleMessage(int group, byte cmd1, Msg msg, DeviceFeature f, String fromPort) {
    if (msg.isExtended()) {
        try {
```

```

// see iMeter developer notes 2423A1dev-072013-en.pdf
int b7 = msg.getBytes("userData7") & 0xff;
int b8 = msg.getBytes("userData8") & 0xff;
int watts = (b7 << 8) | b8;
if (watts > 32767) {
    watts -= 65535;
}

int b9 = msg.getBytes("userData9") & 0xff;
int b10 = msg.getBytes("userData10") & 0xff;
int b11 = msg.getBytes("userData11") & 0xff;
int b12 = msg.getBytes("userData12") & 0xff;
BigDecimal kwh = BigDecimal.ZERO;
if (b9 < 254) {
    int e = (b9 << 24) | (b10 << 16) | (b11 << 8) | b12;
    kwh = new BigDecimal(e * 65535.0 / (1000 * 60 * 60 * 60)).setScale(4, RoundingMode.HAL
F_UP);
}

logger.debug("{}: {} watts: {} kwh: {} ", nm(), f.getDevice().getAddress(), watts, kwh);
m_feature.publish(new DecimalType(kwh), StateChangeType.CHANGED, "field", "kwh");
m_feature.publish(new DecimalType(watts), StateChangeType.CHANGED, "field", "watts");
} catch (FieldException e) {
    logger.error("error parsing {}: ", msg, e);
}
}
}
}

```

## Files

eve-energy-device-app-icons.jpg	44.3 KB	06/04/2015	Luke Murphey
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