

# Proteus Wi-Fi Sensors

## XML API Introduction

### About XML Protocol

XML is a convention for transfer of internet content especially when used for RPC (Remote Procedure Call) applications

### How to access Proteus sensor data in XML format

Proteus sensors support XML api through a URL call. To access the device data from any sensor, simply call the url "Device-IP-Address/status.xml". Depending on how the network is configured, make sure to add any port forwards if present to the IP address.

### Parsing the XML Data

A sample XML response from a Proteus Wi-Fi sensor is shown below.

```
<response>
  <sid0>187902B</sid0>           -- Device Serial Number
  <stu0>OK</stu0>                 -- Device Status
  <tm0>32.0</tm0>                 -- Temperature
  <hu0>.0</hu0>                   -- Humidity
  <i10>.0</i10>                   -- Illumination
  <pot0>1381237861</pot0>        -- Time Stamp (UTC)
  <tun0>F</tun0>                 -- Temperature Units
  <thm>73.4</thm>                -- Temperature Sensor #2 (Thermistor)
  <vin>0.0</vin>                 -- Motion Sensor (See notes)
  <cin>0</cin>                   -- Door Sensor
  <fin>0</fin>                   -- Flood/ water sensor
  <Gsn0>0</Gsn0>                 -- Not used/ future expansion
  <Gpn0>0</Gpn0>                 -- Not used/ future expansion
  <led0>1</led0>
  <led1>1</led1>
  <btn0>up</btn0>
</response>
```

### Notes

1. XML tags may be present even when a particular sensor is not present.
2. Motion sensor provides voltage output. A value of 2.5 or more shows motion.
3. For flood sensor, 0 means Dry and 1 means Wet.
4. For door sensor, 0 means Open and 1 means Closed.