DATA.HTM File Format

Overview

The data.htm file is an HTML web page containing every parameter in the Lighthouse Controller. If you are developing your own application or server script, this information is useful in building long-term historicals or maintaining real time data for custom web pages or databases. The file is internally updated every 60 seconds, so if an application were to re-read the data.htm at this interval, it could keep current with the real-time output of the Lighthouse.

The Lighthouse also has a second mechanism for importing data: UDP packets. The packets are sent at 60 second minimum intervals. Both the data.htm file and the UDP packets contain the same data, so the choice of using one over the other is a matter of programming preference.

To access the file, use `http://192.168.0.250/data.htm,` or whatever IP address or domain name is configured. The file contains minimal html tags, followed by a list of label/value pairs. Each pair is on its own line. The label starts as the first character of the line followed by an equal sign, followed by the value which is double-quoted. There is no white space around the equal sign or anywhere until the closing quote of the value.

Notes

- PH values are returned as a word (unsigned 16-bit integer) which must be divided by 100 to get the proper value. For example, if the value is 823, the pH is 8.23 (823 / 100).
- Temperature values are returned as words and need to be divided by 10. For example, return value of 789 means the temperature is 78.9. There are a few exceptions to this notably, in the graph sets.
- Time values are returned as an 8 byte string in the form "00:00 PM". If the hour is less than 10, then the string is preceded by a space character (i.e., "_7:31 AM").
- Y-axis top and bottom values for PH,ORP, and Temperature for both 24hr and 7-day graph data defines the minimum and maximum Y-axis scales for graphs. In other words, all of the graph values will fall within the top/bottom values.
- System Status codes that are unused or empty contain a zero for the code byte. It is possible to have zeroes mixed in with codes, so all 4 status bytes must be read, discarding any codes of zero.

Label/Value	Description
`Time=" 2:17 PM"`	Current Time
`PH="793"`	Current PH / 100
`Temp="795"`	Current ORP in mV
`ORP="379"`	Current Temperature / 10
`PHMax="795"`	Maximum pH reading today / 100
`TimePHMax="12:00 AM"`	Maximum PH reading - time of day
`PHMin="790"`	Minimum pH reading today / 100
`TimePHMin=" 9:18 AM"`	Minimum PH reading - time of day
`ORPMax="382"`	Maximum ORP reading today in mV
`TimeORPMax=" 8:53 AM"`	Maximum ORP reading - time of day

ORPMin="375"	Minimum ORP reading today in mV
TimeORPMin=" 1:20 AM"	Minimum ORP reading - time of day
TempMax="796"	Maximum Temperature reading today / 10
TempMaxTime=" 9:33 AM"	Maximum Temperature reading - time of day
TempMin="794"	Minimum Temperature reading today / 10
TimeTempMin=" 2:00 AM"	Minimum Temperature reading - time of day
Daylight="1"	Daylight Outlet Status (0=Off 1=On)
Actinic="1"	Actinic Outlet Status (0=Off 1=On)
Refuge="0"	Refugium Outlet Status (0=Off 1=On)
Heater="1"	Heater Outlet Status (0=Off 1=On)
Title="Joe's 125G"	Tank Title/Name
TimeDayOn=" 9:15 AM"	Daylight outlet ON Time
TimeDayOff=" 8:45 PM"	Daylight outlet OFF Time
TimeActOn=" 8:45 AM"	Actinic outlet ON Time
TimeActOff=" 9:20 PM"	Actinic outlet OFF Time
TimeRefOn=" 1:00 AM"	Refugium outlet ON Time (returns "N/A" if "RPO" = 1 or 2)
TimeRefOff=" 1:00 AM"	Refugium outlet OFF Time (return "N/A" if "RPO" = 1 or 2)
TempHtrOn="795"	Heater ON Temperature
TempHtrOff="796"	Heater OFF Temperature
RPO="2"	0=Refugium for Lights 1= Refugium for PH Control 2= Refugium for ORP Control
ORPCtl="369"	ORP Controller Value
StateORPCtl="0"	ORP Controller State
PHCtl="800"	PH Controller Value
StatePHCtl="0"	PH Controller State
Status1="0"	System Status 1st Code
Status2="0"	System Status 2nd Code
Status3="0"	System Status 3rd Code
Status4="0"	System Status 4th Code
StatusT1=" 9:15 PM"	System Status 1st Code- Time
StatusT2=" 9:15 PM"	System Status 2nd Code- Time
StatusT3=" 9:15 PM"	System Status 3rd Code- Time
StatusT4=" 9:15 PM"	System Status 4th Code- Time
TempCutOff="836"	Daylight Cutoff Temperature
StateCutOff="0"	Daylight Cutoff State
TimeSSOn=" 7:30 AM"	Screensaver ON Time
TimeSSOff="10:30 PM"	Screensaver OFF Time
Hour1="14"	1st hour of 24 hr graph data in 24hr format (00-23).
PHAxisMax="800"	Y-Axis top 24-hr graph of PH / 100
PHAxisMin="790"	Y-Axis bottom 24-hr graph of PH / 100
PHVal1="793"	24-hr PH Graph Hour#1
PHVal2="794"	24-hr PH Graph Hour#2
PHVal3="794"';	24-hr PH Graph Hour#3
'PHVal4="795"	24-hr PH Graph Hour#4
PHVal5="796"	24-hr PH Graph Hour#5

PHVal6="797"	24-hr PH Graph Hour#6
PHVal7="797"	24-hr PH Graph Hour#7
PHVal8="796"	24-hr PH Graph Hour#8
PHVal9="796"	24-hr PH Graph Hour#9
PHVal10="795"	24-hr PH Graph Hour#10
PHVal11="794"	24-hr PH Graph Hour#11
PHVal12="794"	24-hr PH Graph Hour#12
PHVal13="793"	24-hr PH Graph Hour#13
PHVal14="793"	24-hr PH Graph Hour#14
PHVal15="792"	24-hr PH Graph Hour#15
PHVal16="791"	24-hr PH Graph Hour#16
PHVal17="791"	24-hr PH Graph Hour#17
PHVal18="790"	24-hr PH Graph Hour#18
PHVal19="790"	24-hr PH Graph Hour#19
PHVal20="790"	24-hr PH Graph Hour#20
PHVal21="791"	24-hr PH Graph Hour#21
PHVal22="791"	24-hr PH Graph Hour#22
PHVal23="793"	24-hr PH Graph Hour#23
ORPVal24="379"	24-hr PH Graph Hour#24
ORPAxisMax="400"	Y-Axis top 24-hr graph of ORP in mV
ORPAxisMin="360"	Y-Axis bottom 24-hr graph of ORP in mV
ORPVal1="380"	24-hr ORP Graph Hour#1
ORPVal2="380"	24-hr ORP Graph Hour#2
ORPVal3="380"	24-hr ORP Graph Hour#3
ORPVal4="382"	24-hr ORP Graph Hour#4
ORPVal5="381"	24-hr ORP Graph Hour#5
ORPVal6="380"	24-hr ORP Graph Hour#6
ORPVal7="379"	24-hr ORP Graph Hour#7
ORPVal8="379"	24-hr ORP Graph Hour#8
ORPVal9="377"	24-hr ORP Graph Hour#9
ORPVal10="376"	24-hr ORP Graph Hour#10
ORPVal11="376"	24-hr ORP Graph Hour#11
ORPVal12="375"	24-hr ORP Graph Hour#12
ORPVal13="376"	24-hr ORP Graph Hour#13
ORPVal14="378"	24-hr ORP Graph Hour#14
ORPVal15="378"	24-hr ORP Graph Hour#15
ORPVal16="379"	24-hr ORP Graph Hour#16
ORPVal17="379"	24-hr ORP Graph Hour#17
ORPVal18="381"	24-hr ORP Graph Hour#18
ORPVal19="381"	24-hr ORP Graph Hour#19
ORPVal20="380"	24-hr ORP Graph Hour#20
ORPVal21="379"	24-hr ORP Graph Hour#21
ORPVal22="378"	24-hr ORP Graph Hour#22
ORPVal23="379"	24-hr ORP Graph Hour#23
ORPVal24="379"	24-hr ORP Graph Hour#24
AxisMinTmp="78"	Y-Axis top 24-hr graph of Temperature
AxisMaxTmp="80"	Y-Axis bottom 24-hr graph of Temperature

Val1Tmp=" 79.6"	24-hr Temp Graph Hour#1
Val2Tmp=" 79.6"	24-hr Temp Graph Hour#2
Val3Tmp=" 79.5"	24-hr Temp Graph Hour#3
Val4Tmp=" 79.5"	24-hr Temp Graph Hour#4
Val5Tmp="val5Tmp"	24-hr Temp Graph Hour#5
Val6Tmp=" 79.6"	24-hr Temp Graph Hour#6
Val7Tmp=" 79.5"	24-hr Temp Graph Hour#7
Val8Tmp=" 79.5"	24-hr Temp Graph Hour#8
Val9Tmp=" 79.5"	24-hr Temp Graph Hour#9
Val10Tmp=" 79.5"	24-hr Temp Graph Hour#10
Val11Tmp=" 79.5"	24-hr Temp Graph Hour#11
Val12Tmp=" 79.4"	24-hr Temp Graph Hour#12
Val13mp=" 79.6"	24-hr Temp Graph Hour#13
Val14Tmp=" 79.5"	24-hr Temp Graph Hour#14
Val15Tmp=" 79.5"	24-hr Temp Graph Hour#15
Val16Tmp=" 79.5"	24-hr Temp Graph Hour#16
Val17Tmp=" 79.5"	24-hr Temp Graph Hour#17
Val18Tmp=" 79.5"	24-hr Temp Graph Hour#18
Val19Tmp=" 79.6"	24-hr Temp Graph Hour#19
Val20Tmp=" 79.6"	24-hr Temp Graph Hour#20
Val21Tmp=" 79.5"	24-hr Temp Graph Hour#21
Val22Tmp=" 79.6"	24-hr Temp Graph Hour#22
Val23Tmp=" 79.5"	24-hr Temp Graph Hour#23
Val24Tmp=" 79.6"	24-hr Temp Graph Hour#24
PHAxisMax7="810"	Y-Axis top 7-day graph of PH / 100
PHAxisMin7="790"	Y-Axis bottom 7-day graph of PH / 100
PH7max1="800"	7-day maximum PH / 100 Day#1 (yesterday)
PH7max2="800"	7-day maximum PH / 100 Day#2
PH7max3="800"	7-day maximum PH / 100 Day#3
PH7max4="800"	7-day maximum PH / 100 Day#4
PH7max5="800"	7-day maximum PH / 100 Day#5
PH7max6="797"	7-day maximum PH / 100 Day#6
PH7max7="793"	7-day maximum PH / 100 Day#7
PH7max1="800"	7-day minimum PH / 100 Day#1 (yesterday)
PH7min2="800"	7-day minimum PH / 100 Day#2
PH7min3="800"	7-day minimum PH / 100 Day#3
PH7min4="800"	7-day minimum PH / 100 Day#4
PH7min5="800"	7-day minimum PH / 100 Day#5
PH7min6="797"	7-day minimum PH / 100 Day#6
PH7min7="793"	7-day minimum PH / 100 Day#7
ORPAxisMax7="380"	Y-Axis top 7-day graph of ORP
ORPAxisMin7="340"	Y-Axis bottom 7-day graph of ORP
ORP7max1="350"	7-day maximum ORP Day#1 (yesterday)
ORP7max2="350"	7-day maximum ORP Day#2
ORP7max3="350"	7-day maximum ORP Day#3
ORP7max4="350"	7-day maximum ORP Day#4
ORP7max5="350"	7-day maximum ORP Day#5

ORP7max6="364"	7-day maximum ORP Day#6
ORP7max7="378"	7-day maximum ORP Day#7
ORP7min1="350"	7-day minimum ORP Day#1 (yesterday)
ORP7min2="350"	7-day minimum ORP Day#2
ORP7min3="350"	7-day minimum ORP Day#3
ORP7min4="350"	7-day minimum ORP Day#4
ORP7min5="350"	7-day minimum ORP Day#5
ORP7min6="364"	7-day minimum ORP Day#6
ORP7min7="378"	7-day minimum ORP Day#7
AxisMinTmp7="77"	Y-Axis top 7-day graph of Temp / 10
AxisMaxTmp7="80"	Y-Axis bottom 7-day graph of Temp / 10
max7Tmp1=" 78.0"	7-day Temp Day#1 (yesterday)
max7Tmp2=" 78.0"	7-day Temp Day#2
max7Tmp3=" 78.0"	7-day Temp Day#3
max7Tmp4=" 78.0"	7-day Temp Day#4
max7Tmp5=" 78.0"	7-day Temp Day#5
max7Tmp6=" 78.8"	7-day Temp Day#6
maxTmp7=" 79.5"	7-day Temp Day#7
minTmp1=" 78.0"	7-day Temp Day#1 (yesterday)
minTmp2=" 78.0"	7-day Temp Day#2
minTmp3=" 78.0"	7-day Temp Day#3
minTmp4=" 78.0"	7-day Temp Day#4
minTmp5=" 78.0"	7-day Temp Day#5
minTmp6=" 78.8"	7-day Temp Day#6
minTmp7=" 79.5"	7-day Temp Day#7