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1  # coding: utf-8
2  from bluepy import btle
3  import time
4  import logging
5  import globals
6  import struct
7  from multiconnect import Connector
8  from notification import Notification
9
10 class tp357():
11     def __init__(self):
12         self.name = 'tp357'
13         self.ignoreRepeat = False
14
15     def isvalid(self,name,manuf='',data='',mac=''):
16         if name.lower() in [self.name]:
17             return True
18         if (mac.lower().startswith("10:76:36")):
19             #broadcasted advertising data
20             return True
21
22     def parse(self,data,mac,name,manuf):
23         action={}
24         action['present'] = 1
25         logging.debug('TP357 PARSE manufacturer: ' + manuf )
26         # temperature
27         logging.debug ('T_manuf: ' + manuf[2:6] )
28         ts_manuf = '0x' + manuf[4:6] + manuf[2:4]
29         t_manuf = int(ts_manuf, 16)/10.0
30         logging.debug('TP357----- Advertising Data=> Temp: ' + str(t_manuf))
31         action['temperature'] = t_manuf
32         # moisture
33         logging.debug ('M_manuf: ' + manuf[6:8] )
34         ms_manuf = '0x' + manuf[6:8]
35         m_manuf = int(ms_manuf, 16)
36         logging.debug('TP357----- Advertising Data=> Moist: ' + str(m_manuf))
37         action['moisture'] = m_manuf
38         return action
39
40     def read(self,mac):
41         result={}
42         try:
43             conn = Connector(mac)
44             conn.connect()
45             if not conn.isconnected:
46                 conn.connect()
47                 if not conn.isconnected:
48                     return
49             Firm = bytearray(conn.readCharacteristic('0x24'))
50             batt = bytearray(conn.readCharacteristic('0x18'))
51             battery = batt[0]
52             firmware = "".join(map(chr, Firm))
53             notification = Notification(conn,tp357)
54             conn.writeCharacteristic('0x10','0100',response=True)
55             notification.subscribe(2)
56             result['battery'] = battery
57             result['firmware'] = firmware
58             result['id'] = mac
59             logging.debug('TP357-----'+str(result))
60             return result
61         except Exception as e:
62             logging.error(str(e))
63         return result
64
65     def handlenotification(self,conn,handle,data,action={}):
66         result={}
67         if hex(handle) == '0xe':
68             received = bytearray(data)
69             temp,hum = "".join(map(chr, received)).replace("T=", "").replace("H=", ""
70             ).rstrip(' \t\r\n\0').split(" ")
71             result['moisture'] = hum
72             result['temperature'] = temp

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72         result['id'] = conn.mac
73         result['source'] = globals.daemonname
74         globals.JEEDOM_COM.add_changes('devices:'+conn.mac,result)
75
76     globals.COMPATIBILITY.append(tp357)
77
```