Id and naming systems.

Every sensor must have a unique id. Note, there can only be a total of 9 sensors in the system described in this document. If more are needed a new system must be developed.

Device types vs ids

There are only 2 types of devices, a collector, and a sensor. To transmissions indented for a sensor must start with “:02” All transmissions indented for a collector must start with “:01”

Device Ids

Theses are unique number assigned to every sensor device between 1-9. I collector doesn't need any id.

Sensor identification

In addition to device id's, a sensor id is also needed. This identifies what sensor the following data is from, and one sensor device can have multiple of. For example, a sensor may send a transmission saying the temperature is 14 degrees, followed by saying that the gate is open. The collector will differentiate the data types by sensor id. Multiple sensor nodes can use the same sensor id, if the carry the same sensors, however cannot have the same device id.

How sensor and device id's are sent

I transmission, these to id's are sent in the same byte. The device id becomes the tens column, while the sensor id becomes the one's column. For example, Sensor node 1 records temperature as 18 degrees, it would send:

11,18. The collector looks at the first digit as the device id, and the second as sensor id. Sensor id's are as follows:

1	Temperature
2	Gate
3	Wind speed
4	Rainfall
5	Humidity
Anything else	Room for expansion. It will send it to the sever as “undefined”