## **MODBUS REGISTERS**

Currently this device uses the fixed Address 1. On the next firmware release we will allow for dynamic setting of the address as well as different register map and other customizable features (baud rate, etc).

## Serial configuration is 9600 8nl.

Register Address (protocol Address)	Register Address (PLC address)	R/W	Description	NOTES
0	1	R/W	AC ON/OFF 0: Off 1: On	This controls the power state of the A/C.
1	2	R/W	AC MODE 0: Auto 1: Heat 2: Dry 3: Fan Only 4: Cool	The operating mode of the A/C.
2	3	R/W	FAN SPEED 0: Auto 1: Low 2: Med 3: High	The fan speed of the A/C.
3	4	R/W	IR PROTOCOL 0 to 254	If set to any other value outside 0 to 254 it will use the currently configured protocol.
4	5	R/W	AC Temperature Setpoint 16-31C (x10C)	This defines the temperature setpoint that the minisplit will be configured at.
6	7	R/W	Command Type 0: power 1: temperature 2: mode 3: fan speed 4: display 5: vertical vane 6: horizontal vane 7: turbo 8: units	Command type is only required for some special commands like display, turbo, swing or units. For the rest of the commands the value 0 (power) can be used.
7	8	R/W	Display 0: Off 1: On	Some Minisplits have a toggle command for display, so sending 0 or 1 will toggle the current state.
8	9	R/W	Turbo 0: Off 1: On	Turns ON or OFF the Turbo mode available on some models.



Register Address (protocol Address)	Register Address (PLC address)	R/W	Description	NOTES
9	10	R/W	Vertical Vane 0: Off 1: Auto 2: Top 3: Top-Center 4: Center 5: Bottom-Center 6: Bottom	This is the vertical swing. Not all models have the discrete options from 2 to 6. G14
10	11	R/W	Horizontal Vane 0: Off 1: Auto 2: Left 3: Left-Center 4: Center 5: Right-Center 6: Right 7: Sides	This is the horizontal swing.  Not all models have the discrete options from 2 to 7.
11	12	R/W	Temperature Units 0: Celsius 1: Fahrenheit	Some A/C have a Units command that changes the display's units.
12	13	R	Command Source 0-31	Indicates who sent the last command. There are several sources (IR Remote, thermostat, Mobile App, Modbus, Local Rule, Remote Rule, HTTP API, Bacnet, etc)
13	14	R	Indoor Temperature -32768 (Initial Value) -50 to 125C (X10)	Temperature in Celsius read by the Cuby or one of its sensors
15	16	R	Indoor Relative Humidity -32768 (Initial Value) 0 to 100% (X10)	Relative humidity read by the Cuby or one of its sensors
19	20	R/W	Occupancy Status -32768 (Initial Value) 0: Vacant 1: Occupied	Occupancy status.
22	23	R	Open Time -32768 (Initial Value) 0-32000 seconds	Time in seconds that at least one sensor has been in an open state. It resets when all sensors are closed.
40	41	R/W	Force IR Command	Writing a 1 to this register forces an IR command. This register will always read 0.
48	49	R	FW Version	The current firmware version of the Cuby.

