

Lufft Multi-Parameter Weather Sensors

Sensor Interface Manual

WS200

WS300

WS301



WS400

WS500

WS501

WS600

Table of Contents

Overview	1
Installation	2
Connecting to an iSIC Data Logger	2
Computer Interface	3

Revision Date: May 26, 2011

Overview

The Lufft WSxxx family includes a range of compact weather stations. Depending on the model, each WSxxx weather station has a combination of sensors for various measurements.

	WS200	WS300	WS400	WS500	WS600
Air Temperature		•	•	•	•
Humidity		•	•	•	•
Air Pressure		•	•	•	•
Precipitation			•		•
Wind Direction	•			•	•
Wind Speed	•			•	•
Compass	•			•	•



© Fondriest Environmental, Inc.

Figure 1: Lufft WS600 weather sensor

Installation

Follow the manufacturer's recommendation for setting up and configuring the Lufft WSxxx.

Connecting to an iSIC Data Logger

To wire the sensor into the iSIC, route the cable and wires through a gland fitting installed in the enclosure, and then unplug the green terminal strip from the data logger before securing individual wires according to the wiring diagram below. Avoid clamping on wire insulation.



Figure 2: Unplug the green terminal strip from the data logger before wiring the sensor

Note: Dashed line indicates white wire

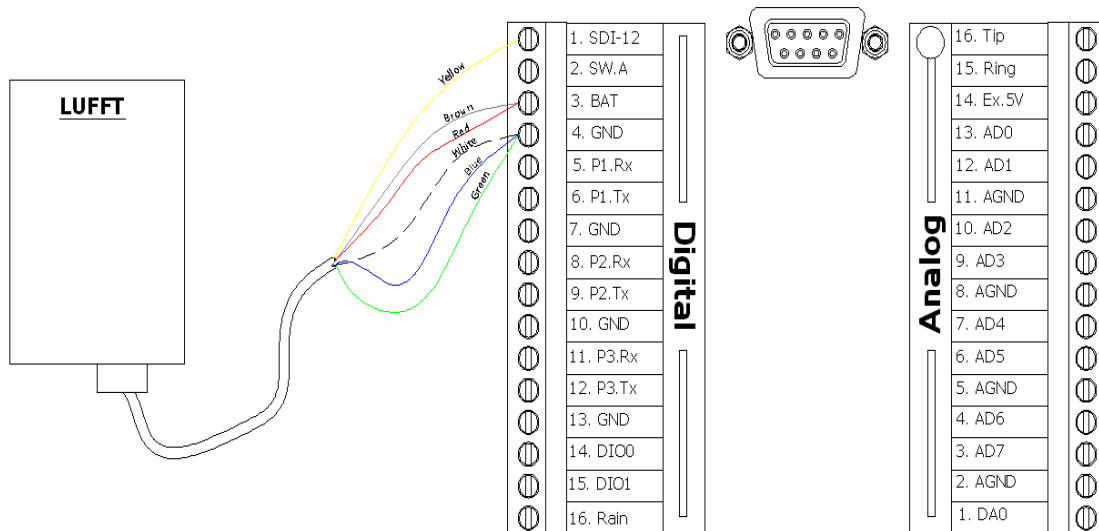


Figure 3: Physical wiring of a WSxxx weather sensor to an iSIC terminal strip

Table 1: Table for wiring a WSxxx to an iSIC data logger via SDI-12

Digital Terminal Strip	
1. SDI-12	Yellow (SDI-12)
2. SW.A	-
3. BAT	Red (Heating V+) Brown (V+)
4. GND	White (GND) Blue (Heating GND) Green (SDI-12 GND)
5. P1.Rx	-
6. P1.Tx	-
7. GND	-
8. P2.Rx	-
9. P2.Tx	-
10. GND	-
11. P3.Rx	-
12. P3.Tx	-
13. GND	-
14. DIO0	-
15. DIO1	-
16. Rain	-

Notes:

- **The Pink and Gray wires must be jumped together to enable SDI-12 communication.**

Computer Interface

iChart software is used to set up the iSIC data logger, as well as to acquire and process data. Launch the software and select **File | New Project**. Follow the Setup Device Wizard to create a project file. Additional information is available in the iChart manual.



1415 Research Park Drive
Beavercreek, OH 45432
937-426-2703
www.NexSens.com