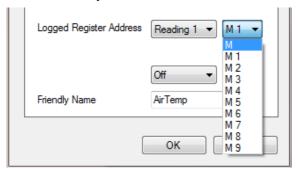# Lufft WSx-UMB Weatherstation Configuration information for Radcom SDI-12 loggers using the IDT

SDI-12 uses 2 styles of data sets:

1) The "M" Basic Data set which contains a smaller selection of common measurements as detailed in section 19.6.4 of the Lufft manual
2) The "Mx" Additional Measurement Commands that contain groups of measurement types detailed in section 19.6.5.
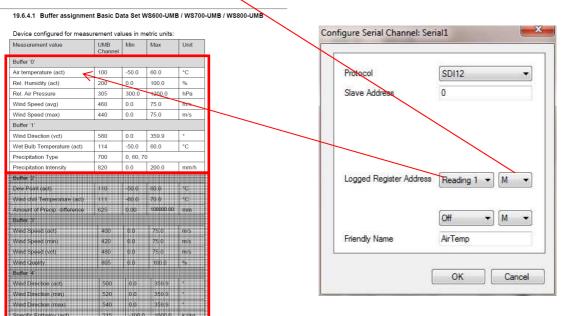
The data set you wish to read is selected using the dropdown below -

where choosing M selects the **Basic** set and choosing M 1 to M 9 selects the **Additional** set

The SDI-12 logger reads data from the weather station in 9 reading sets, so once you choose your data set ("**M** x") which contains a selection of common measurements, you then select the **Reading** that you wish from the set.

Example 1: **Basic Data Set (M)**
Refer to Lufft manual section 19.6.4

Note Buffers '2' and up are not supported by the logger.

Example 2: **Additional Measurement Set (M x)**
Refer to Lufft manual section 19.6.5

Available Measurement Sets with available measurement values are:

M1	Temperature	9 Values
M2	Humidity	9 Values
M3	Air Pressure	9 Values
M4	Wind	9 Values
M5	Compass	1 Values
M6		
	WS401/601: Precipitation, Leaf Wetness	9 Values
	Others: Precipitation	4 Values
M7		
	WS800-UMB: Global Radiation, Lightning Sensor	9 Values
	Others: Global Radiation	4 Values
M8	Ext. Temperature	1 Value

If the sensor type requested with the measurement command is not available with the actual variant of the Smart Weather Sensor (WS200-UMB ... WS700-UMB) the logger will respond with "Error".

Selecting the 8th reading in the list.

Example 3: **Additional Measurement Set (M x)**
Refer to Lufft manual section 19.6.5.2 – Humidity

19.6.5.2 Buffer Assignment Additional Measurement Commands M2

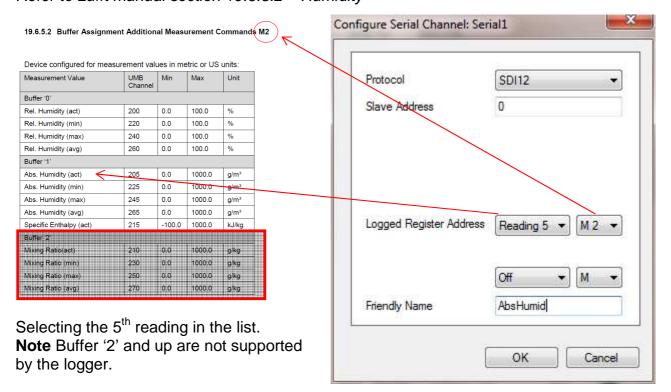Device configured for measurement values in metric or US units:

Measurement Value	UMB Channel	Min	Max	Unit
Buffer '0'				
Rel. Humidity (act)	200	0.0	100.0	%
Rel. Humidity (min)	220	0.0	100.0	%
Rel. Humidity (max)	240	0.0	100.0	%
Rel. Humidity (avg)	260	0.0	100.0	%
Buffer '1'				
Abs. Humidity (act)	205	0.0	1000.0	g/m³
Abs. Humidity (min)	225	0.0	1000.0	g/m³
Abs. Humidity (max)	245	0.0	1000.0	g/m³
Abs. Humidity (avg)	265	0.0	1000.0	g/m³
Specific Enthalpy (act)	215	-100.0	1000.0	kJ/kg
Buffer '2'				
Mixing Ratio(act)	210	0.0	1000.0	g/kg
Mixing Ratio (min)	230	0.0	1000.0	g/kg
Mixing Ratio (max)	250	0.0	1000.0	g/kg
Mixing Ratio (avg)	270	0.0	1000.0	g/kg

Configure Serial Channel: Serial1

Protocol: SDI12

Slave Address: 0

Logged Register Address: Reading 5   M 2

Off   M

Friendly Name: AbsHumid

OK   Cancel

Selecting the 5th reading in the list.
Note Buffer '2' and up are not supported by the logger.

Document History:

Edition	Date of Issue	Modification	Notes
1st	19/04/15	Release	