Engineering Note: EN0050   Hydro-Probe Orbiter Default Configuration

Summary: Lists the factory default parameters for the Hydro-Probe Orbiter.

Products affected: ORB1, ORB2, ORBA1, ORBA2

Revision Date: December 2013   Author: P. Rogers

Parameter	Range/options	Standard Default
Input/output configuration		
Output type *	0-20mA 4-20mA Compatibility	0 – 20 mA (0–10V)
Output variable 1	Filtered moisture % Average moisture % Filtered unscaled Average unscaled Material temperature	Filtered unscaled
Output variable 2	Filtered moisture % Average moisture % Filtered unscaled Average unscaled Material temperature	Material temperature
High %	0 – 100	20.00
Low %	0 – 100	0.00
Input Use 1	Average/hold Moisture/temp Unused	Average/hold
Input/output Use 2	Unused Moisture/temp Bin empty Data invalid Probe OK	Unused
Signal processing configuration		
Smoothing time	1.0, 2.5, 5.0, 7.5, 10	7.5 sec
Slew rate +	None, Light, Medium, Heavy	Light
Slew rate -	None, Light, Medium, Heavy	Light
Moisture calibration		
A		0.0000
B		0.2857
C		-4.0000
SSD		0.00
Averaging configuration		
Average hold delay	0.0, 0.5, 1.0, 1.5, 2.0, 5.0	0 sec
High limit (m%)	0 – 100	30.00
Low limit (m%)	0 – 100	0.00
High limit (us)	0 – 100	100.00
Low limit (us)	0 – 100	0.00
Temperature compensation – ORB1		
Electronics temp. coeff		0.002
Resonator temp. coeff, ORBA1		0.0075
Resonator temp. coeff, ORBA2		0.015
Material temp. coeff		0.0000
Temperature compensation – ORB2		
Electronics temp. coeff ORBA1		-0.0035
Electronics Amp. coeff ORBA1		-0.15
Electronics temp. coeff ORBA2		-0.0035
Electronics Amp. coeff ORBA2		-0.15
Resonator temp. coeff, ORBA1		0.016
Resonator Amp. coeff, ORBA1		0.1
Resonator temp. coeff, ORBA2		0.015
Resonator Amp. coeff, ORBA2		0.036
Material temp. coeff		0.0000

  * Note: If connecting the Hydro-Probe Orbiter to a Hydro-View II or Hydro-Control IV, then set this to Compatibility