



AANDERAA DATA INSTRUMENTS

CALIBRATION CERTIFICATE

Form No. 615, Dec 2005

Electronic board: 3623
Electronic board serial: 897
Reference reading: 296

Product: RCM 9 MkII
Serial No: 727
Calibration Date: 16 June 2008

For details; see the individual Calibration Sheets.

The calibration coefficients listed below are valid for sensors with the following serial numbers:

Sensor	Type	Serial No.	Range
Doppler Current Sensor	3920	282	
Temperature Sensor	3621	906	
Pressure Sensor	3815B	226	0-3500 kPa
Conductivity Sensor	3619	638	0-75 mS/cm
Turbidity Sensor	3612	647	0-20 NTU

Calibration Coefficients:

Ch. No.	Parameter	A	B	C	D	Unit
1	Reference	0	1.000E+00	0	0	-
2	Current Speed	0	2.933E-01	0	0	cm/s
3	Current Direction	0	3.516E-01	0	0	Deg. M
4	Temperature Range					
	Arctic	-3.037E+00	8.976E-03	-3.476E-07	1.134E-10	Deg. C
	High	9.774E+00	2.402E-02	-5.941E-07	2.820E-09	Deg. C
	Low	-2.808E+00	2.421E-02	-2.238E-06	2.056E-09	Deg. C
	Wide	-6.592E-01	3.425E-02	-6.292E-06	4.800E-09	Deg. C
	Other					
5	Conductivity Range					
	0-74 mS/cm	2.883E-01	7.207E-02	0	0	mS/cm
6	Pressure	-6.222E+01	3.523E+00	3.632E-05	0	kPa
7	Turbidity	-9.350E-01	2.749E-02	-1.383E-05	1.215E-08	NTU
8						

Date: 16 June 2008

Sign: Brandon Rieff

Service and Support Associate

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1. Visual and Mechanical Checks:

- 1.1 Sensors fixed in correct position
- 1.2 Wire harness, screws and sensor plugs
- 1.3 Epoxy coating intact
- 1.4 Zinc anode installed
- 1.5 Clean and inspect O-ring groove

2. Performance Tests of complete instrument:

- 2.1 Current consumption at continuous operation, maximum 120 mA
- 2.2 Current consumption between measurements at 120 min. interval, maximum 1.0 mA average
- 2.3 Check operation with Test Unit 3751, -5°C to +35°C, (all channels tested, 16 hour run, data stored in DSU 2990)
- 2.4 Check remote start, PDC-4 output and external powering
- 2.5 Electrical isolation between system ground and Top end-plate
- 2.6 Test of Operation in Burst Mode, 2 minute interval
- 2.7 Test of RS 232 Converter 3818 connected to Lap Top, 2 hrs run, 8 channel, non stop

3. Final Check prior to Shipment:

- 3.1 Doppler Current Sensor is tested with Test Unit 3731
- 3.2 Temperature readings correspond to room temperature
- 3.3 Conductivity Sensor reads correct with seawater loop
- 3.4 Check that the pressure sensor is oil filled
- 3.5 Pressure Sensor gives correct reading at air pressure
- 3.6 Turbidity reading increases when a reflector is placed 20cm in front of it
- 3.7 The oxygen sensor reads maximum in air
- 3.8 Erased DSU installed
- 3.9 Set temperature range switch to default setting and conductivity range to 0-74 mS/cm
- 3.10 Set interval switch to 10 min, channel selector to 8 channel and OFF/ON switch to OFF position
- 3.11 Inspect O-ring groove and clean and grease O-ring