

IMU Calibration Certificate
No: LCI-100C 1223



For

Peregrine Aerial Surveys, Inc.

#201 1255 Townline Road
Abbotsford, B.C. V2T 6E1

Canada

Northrop Grumman LITEF GmbH

Data Sheet PN: 153310-0000-390 Rev: G

Product: LCI-100C PN: 153300-2000 MOD: 000 SN: 1223 Config-ID: 1011

TESTER CONFIGURATION:

Peripheral: A000 Computer: IMP119 Fixture ID: 91 Adapter: SN: 1003 Basis SW: Appl. SW: IAS: Operator: Default Operator Comment: Default Comment
PN: 309442-5003-001 Slot: 1 PN: 309327-7700-000 PN: 309186-1001 PN: 309943-2000-000 PN: 309197-1013-882
Rev: B Pos: 1 Rev: B Rev: A Rev: K Rev: A(3.52)

TEST RESULT:

Start CFG: 19/07/2018, 07:34 End CFG: 19/07/2018, 07:34
Number Tests: 6 Tests passed: 6
Fails: 0 Overall Test Result: PASS

Name: Operator: Murgel Signature, Stamp: Date: 19.07.18

ATP Base Unit PN: 153310-1500 SN: 1219 Pass: [check] Fail:

Name: NG LITEF QA: C. Kessler Signature, Stamp: NG LITEF 38 Date: 20. JULI 2018

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Result Summary:

<i>Testreference:</i>	<i>Date:</i>	<i>Result:</i>
Setup IFBOX	19/07/2018, 07:34	pass
Switch UUT on	19/07/2018, 07:34	pass
Configure UUT	19/07/2018, 07:34	pass
HDLC Interface	19/07/2018, 07:34	pass
Read Default Information	19/07/2018, 07:34	pass
Switch off UUT	19/07/2018, 07:34	pass

Detailed Results:

	<i>L. Limit</i>	<i>Result</i>	<i>U. Limit</i>	<i>Unit</i>	
<u>Setup IFBOX</u>					Date: 19/07/2018, 07:34 Test: <u>pass</u>
<u>Switch UUT on</u>					Date: 19/07/2018, 07:34 Test: <u>pass</u>
Current at +27.69 V	0.200	0.361	0.750	A	<u>pass</u>
<u>Configure UUT</u>					Date: 19/07/2018, 07:34 Test: <u>pass</u>
CRC of UI-Data	0x571FF4FA	0x571FF4FA			<u>pass</u>
UEnable		8			
RES		0			
SyncOut		21327			
TransRate		33920			
UBaud		33792			
SyncFreq		500			
UMsgID		128			
UStop		1			
UParity		0			
UCRCDef		220			
UCrcPoly		33568			
UCrcStart		0			
UCrcXor		0			
<u>HDLC Interface</u>					Date: 19/07/2018, 07:34 Test: <u>pass</u>
Number of Bytes	35	35			<u>pass</u>
Gyro Status	0x00000000	0x00000000			<u>pass</u>
Accel Status	0x00000000	0x00000000			<u>pass</u>
Number of Bytes	42	42			<u>pass</u>
Message ID	43	43			<u>pass</u>
<u>Read Default Information</u>					Date: 19/07/2018, 07:34 Test: <u>pass</u>
UUT-PN		153300-2000-000			
UUT-SN		1223			
UUT-REV		A			
<u>Switch off UUT</u>					Date: 19/07/2018, 07:34 Test: <u>pass</u>

UUT PN: 153300-2000 MOD: 000 SN: 1223

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GNSS/IMU Performance (Calibration Flight 02.07.2018)

Angular Accuracy:

Component	StDev Omega [deg]	StDev Phi [deg]	StDev Kappa [deg]
IMU	0.0017	0.0025	0.0014

Position Accuracy:

Component	StDev X [m]	StDev Y [m]	StDev Z [m]
GNSS	0.0369	0.0315	0.0176

Camera: LCI-100C
 Manufacturer: Northrup Grumman LITEF GmbH
 Serial Number: 1223
 Date of Calibration Flight: 06. July 2018
 Date of Report: 06. July 2018

This GNSS/IMU system is certified by Leica Geosystems Technologies and is fully functional within its specifications and tolerances.

Date of Calibration: July 2018

Date of Certification: July 2018




Dipl.Ing. Christian Mueller, Product Manager

Dipl.Ing. Gerald Kapoun, Technical Consultant
