

ANNEX I DAE Calibration Certificate



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IBC MRA



Client:

CTTL

Certificate No: Z17-97015

CALIBRATION CERTIFICATE

Object DAE4 - SN: 1331

Calibration Procedure(s) FD-Z11-002-01

Calibration Procedure for the Data Acquisition Electronics

(DAEx)

Calibration date: January 19, 2017

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22 ± 3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards ID # Cal Date(Calibrated by, Certificate No.) Scheduled Calibration

Process Calibrator 753 1971018 27-June-16 (CTTL, No:J16X04778) June-17

Calibrated by:

Name Function

Yu Zongying SAR Test Engineer

Lu Bingsong

Signature

Reviewed by:

Qi Dianyuan SAR Project Leader

Approved by:

Deputy Director of the laboratory

Issued: January 20, 2017

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

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Glossary:

DAE

data acquisition electronics

Connector angle

information used in DASY system to align probe sensor X

to the robot coordinate system.

Methods Applied and Interpretation of Parameters:

- DC Voltage Measurement: Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- Connector angle: The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The report provide only calibration results for DAE, it does not contain other performance test results.





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DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1μV, full range = -100...+300 mV Low Range: 1LSB = 61nV, full range = -1.....+3mV DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	Х	Υ	Z
High Range	404.775 ± 0.15% (k=2)	404.211 ± 0.15% (k=2)	404.192 ± 0.15% (k=2)
Low Range	3.98156 ± 0.7% (k=2)	4.00135 ± 0.7% (k=2)	3.99974 ± 0.7% (k=2)

Connector Angle

Connector Angle to be used in DASY system 197.5° ± 1 °
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ANNEX J Accreditation Certificate

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600118-0

Telecommunication Technology Labs, CAICT

Beijing China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2016-09-29 through 2017-09-30

Effective Dates



For the National Voluntary Laboratory Accreditation Program