



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx ITS 14.0046X issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2014-08-08** Page 1 of 3

Applicant: **Advanced Sys-tek Pvt. Ltd**
299/300,GIDC,
Makarpura,
Vadodara
390010 Gujarat
India

Electrical Apparatus: **Smartload**
Optional accessory:


Type of Protection: **Ex d & Ex tb**

Marking: **Ex d IIB T6 Gb**
Ex tb IIIB T85°C Db IP65
Tamb = -20°C to +60°C
IECEx ITS 14.0046X

Approved for issue on behalf of the IECEx Certification Body: A Dickinson

Position: Certification Officer

Signature:
(for printed version)


8 Aug 2014

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom



Intertek



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Manufacturer: **Advanced Sys-tek Pvt. Ltd**
299/300, GIDC,
Makarpura,
Vadodara
390010 Gujarat
India

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition: 6.0
IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition: 6
IEC 60079-31 : 2008 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'
Edition: 1

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/ITS/ExTR14.0049/00](#)

Quality Assessment Report:

[GB/ITS/QAR13.0007/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Batch Controller Model: SmartLoad is an electronic batching, blending, additive injection and flow measurement device designed to deliver precise quantities of petroleum, chemical and liquid products in a variety of applications like truck, rail, marine, aviation and pipeline loading and unloading facility (used for the liquid products gasolines, antifreeze, fuel oils, fertilizers, solvents, paints, LPG, LNG, lube oils, chemicals, and dyes). The SmartLoad is manufactured from LM6 Aluminium Alloy or alternatively can be manufactured from SS316 or SS316L and has the approximate dimensions 325mm x 350mm x 350 mm. A key pad is mounted on the cover of FLP enclosure. The keys are magnetically coupled with internal circuit thus no flame path is formed by the keys. The key pad is user-friendly and cellular phone like alpha-numeric keypad for easy operation on the enclosure cover. The enclosure has two viewing windows which are formed by two sections which are hinged and form a flanged joint when mated. Six threaded entries are provided for connection to external circuits via certified cable glands (Three 1¼" NPT, Two 1" NPT and One ½" NPT). Large graphic LCD display for easy to read text with automatic backlight and contrast adjustment. Selectable I/O boards are provided in card rack for future expansion purpose. SmartLoad directly interfaces with flow meters, digital control valves, additive injector panels, safety interlocks, Remote Interaction Terminal (RIT) and proximity card readers. The SmartLoad can operate in Manual or auto mode. In Manual mode, it operates as standalone unit perform local authorization based on safety circuit inputs & other deliverable parameters. In auto mode, it operates as slave to the host system (through Terminal Automation Software or LRC). Important parameter can be locked to prevent any change by unauthorized access by sealable / lockable keys.

CONDITIONS OF CERTIFICATION: YES as shown below:

- Only suitably certified Ex d IIB Gb / Ex tb IIIB Db items are to be used at the threaded entries
- The internal battery is only to be replaced by the manufacturer as listed above

Routine Manufacturing Tests

The manufacturer have elected to perform a routine overpressure test at 10 bar. This routine overpressure test must be conducted as per Clause 16 of IEC 60079-1 Edition 6, on each and every enclosure, with records kept, and no damage or deformation must occur as defined in the acceptance criterion of this clause.



Schedule of Drawings for Certificate: IECEx ITS 14.0046X Issue 0

Manufacturer:
Advanced Sys-tek Pvt. Ltd. (GE Oil & Gas)
299-300,
GIDC Makarpura Vadodara – 390010 Gujarat,
India

Document No.	Sheets	Document Title	Issue	Date (dd/mm/yyyy)
MFG EX/1410801	1	INTERNAL ASSEMBLY OF SMARTLOAD BATCH CONTROLLER	0	14/05/14
MFG EX/1410802	1	KEYCAP & SPRING	0	15/05/14
MFG EX/1410803	1	DETAIL ANALYSIS OF LITHIUM BATTERY USED IN CPU BOARD OF SMARTLOAD BATCH CONTROLLER	0	15/05/14
MFG EX/1410804	1	UNIT ASSEMBLY SMARTLOAD BATCH CONTROLLER	0	15/05/14
MFG EX/1410809	1	WARNING LABEL OF BATTERY	0	21/05/14
MFG EX/1410810	1	MATERIAL COMPOSITIONS	0	21/05/14
MFG EX/1410811	1	ENCAPSULATION OF LITHIUM BATTERY	0	12/06/14
MFG EX/1410812	1	GASKET AND GROOVE DIMENSIONS OF SMARTLOAD	0	12/06/14
MFG EX/1410814	4	SMARTLOAD BATCH CONTROLLER	0	17/07/13
MFG EX/1410902	1	SERIAL NUMBER PLATE OF IECEx SMARTLOAD	0	12/06/14

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