



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 UL 16.0045X Issue No: 0 Certificate history:
Issue No. 0 (2016-03-21)

Status: **Current** Page 1 of 4

Date of Issue: **2016-03-21**

Applicant: **Digital Electronics Corporation**
4-4-9 Kitahama, Chuo-Ku, Osaka-shi
Osaka 541-0041
Japan

Equipment: **Box iPC Modular and Display, Models PFXP Series**
Optional accessory:

Type of Protection: **Intrinsic Safety "ic", Non-sparking "nA"**

Marking: Ex ic nA IIC T4 Gc

0°C to +55°C

*Approved for issue on behalf of the IECEx
Certification Body:*

Katy A. Holdredge

Position:

Senior Staff Engineer

*Signature:
(for printed version)*

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:

UL LLC
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America





IECEX Certificate of Conformity

Certificate No: IECEx UL 16.0045X Issue No: 0
Date of Issue: 2016-03-21 Page 2 of 4
Manufacturer: **Digital Electronics Corporation**
4-4-9 Kitahama, Chuo-Ku, Osaka-shi,
Osaka 541-0041
Japan

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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

*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:

[US/UL/ExTR16.0049/00](#)

Quality Assessment Report:

[FR/INE/QAR16.0001/00](#)



IECEx Certificate of Conformity

Certificate No: IECEx UL 16.0045X

Issue No: 0

Date of Issue: 2016-03-21

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Models PFXP Series are Touch Panel PC that shall be mounted in a suitable enclosure with a minimum ingress protection rating of at least IP54 in accordance with IEC 60079-15. They are provided with either a 4:3 15" or 15.6"W touch panel and Type A Box PC or Type B Box PC. The differences between Box PCs are size, CPU and number of expansion slot. The differences between panels are size, construction and touch function. Two optional DC fans and one optional USB expansion PCIE can be equipped with Type A Box PC. The front panels are evaluated and suitable for IP65.

The 4:3 15" panel is resistance type touch screen and meets intrinsically safe "ic". The 15.6"W panel is capacitance type touch screen. All non-sparking components are "nA". These devices are intended for indoor application only. These devices are intended to be front panel-mounted or installed in the end application with only the front touch panel accessible to the user.

See Annex for additional information.

CONDITIONS OF CERTIFICATION: YES as shown below:

Both 4:3 15" and 15.6"W display front panel surface have been evaluated to the enclosure requirements for Ingress Protection to IP 65 in accordance with IEC 60079-15.

The equipment shall be installed in an enclosure that provides a degree of protection not less than IP54 in accordance with IEC 60079-15.

The equipment shall only be used in an area of not more than pollution degree 2 as defined in IEC 60664-1.

Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage at the supply terminals to the equipment.

Do not expose to direct sunlight or UV light source.



IECEX Certificate of Conformity

Certificate No: IECEx UL 16.0045X

Issue No: 0

Date of Issue: **2016-03-21**

Page 4 of 4

Equipment must be installed in a low risk of mechanical danger environment.

Annex:

[Annex to IECEx UL 16.0045X Issue 0.pdf](#)

Nomenclature:

PFXP	P	2	7	X	C	D	4	Y	N	ZZZ	0
I	II		III	IV	V	VI	VII	VIII	IX	X	

- I. Prefix:
PFXP: Model type
- II. Model Designation:
U: Represent CPU, Haswell Celeron 2980U
P: Represent CPU, Haswell i7-4650U
- III. Display module:
7: Represent 4:3 15" display panel
J: Represent 15.6"W display panel
- IV. Combination of CPU, RAM and PCI slot
X can be any character to represent combination.
- V Expansion slot configuration:
C or 7: Base unit
F or W: Expansion USB board and Fans Module
- VI. Power Supply:
D: DC power source.
- VII. Memory:
4: 4GB
8: 8GB
A: 16GB
- VIII. Operating system
Y can be any character to represent OS type.
- IX. Storage type:
N: None
A: CFast
J or K: HDD
L, M or P: SSD
- X. Combination of second storage type, Interface options and Software bundle:
Z can be any character to represent combination.