



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX KTL 21.0013U** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2021-05-06
Applicant: **SUNIL ELECOMM CO., LTD.**
21-19, Jangsu-ro 342beon-gil, Jangsu-myeon, Yeongju-si
Gyeongsangbuk-do 36145
Korea, Republic of
Ex Component: LED array, EXLED CLASSIC *-*
This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).
Type of Protection: **Increased safety "eb" and Encapsulation "mb"**
Marking: Ex eb mb IIC Gb

Approved for issue on behalf of the IECEX
Certification Body:

Park, Jong-koo

Position:

Certification Manager

Signature:
(for printed version)

Date:

[Handwritten Signature]
2021-05-06

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 www.iecex.com or use of this QR Code.



Certificate issued by:

Korea Testing Laboratory
87, Digital-ro, 26-gil, Guro-gu
Seoul
Korea, Republic of





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Manufacturer: **SUNIL ELECOMM CO., LTD.**
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Gyeongsangbuk-do 36145
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Additional
manufacturing
locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

This Certificate **does not** indicate compliance with 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:

KR/KTL/ExTR21.0011/00

Quality Assessment Report:

KR/KTL/QAR18.0004/02



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Ex Component(s) covered by this certificate is described below:

LED array, EXLED CLASSIC *-* series, is the Ex Component which shall be mounted partly within and partly external to the equipment. Terminal blocks with type of protection "eb" are provided and these are exposed to the exterior. These shall be protected with appropriate protection methods.

Rated service temperature

-40 °C ~ +100 °C (EXLED CLASSIC *-S)

-40 °C ~ +105 °C (EXLED CLASSIC *)

Electrical data

Rated Voltage: (60/120) Vdc, Current: 0.85 A

Model configuration

EXLED CLASSIC (a)-(b)

a(wattage): 50(50 W), 100(100 W)

b(LED manufacturer): None, S

SCHEDULE OF LIMITATIONS:

1. Rated service temperature: -40 °C to 105 °C / -40 °C to +100 °C
2. LED array shall be mounted partly within and partly external to the equipment. Certified terminal blocks with the type of protection "eb" are provided and these are exposed to the exterior. These shall be protected with appropriate protection methods.
3. When it is installed in the Ex e enclosures, creepage distance and clearance shall be taken into account.
4. LED array shall be supplied by the certified LED converter. Followings shall be considered.
 - The supply circuit must include a protective device that limits the current to 1.7 A, or
 - The supply circuit must include an electrical fuse with a maximum rated current of 1 A, corresponding rated voltage, and capable of withstanding the prospective short-circuit fault current of 1500 A.
5. When integrating the LED array, the maximum surface temperature shall be measured by considering clause 4 in the Schedule of Limitations.