寶虹電子
PCEC
Power-Con Electronics Corporation

AS9100D CERTIFIED ISO 9001

Defense & Military & LED Traffic Signs Intelligent Power Supply Master

Power-Con Electronics

Since 1997

寶虹電子 PCEC
Power-Con Electronics Corporation

Established in 1997, located in Taoyuan, Taiwan. Capital in US$3.5 Million

www.power-con.com.tw

寶虹電子 PCEC

Long-term cultivation on Military Power Supplies and various Industrial LED Traffic Sign Smart Driver Design and Manufacture

Brief

Power-Con Electronics Corporation (PCEC) is ISO9001 & AS9100 certified. And an approval military power product vendor by National Chung-Shan Institute of Science and Technology (NCSIST), the sole organization of Taiwan's defense technology research and development.

afaq AFNOR CERTIFICATION

Certificat
Certificate

N° 2020/86815.2

AFNOR Certification certifies that the quality system implemented by:
AFNOR Certification certifie que le système qualité mis en place par :

POWER-CON ELECTRONICS CORP.

for the following activities:
pour les activités suivantes :

DESIGN AND MANUFACTURING OF POWER SUPPLIES.

has been audited in accordance with the EN 9104-001:2013 and found to meet the requirements of the standard:
a été audité conformément à l'EN 9104-001:2013 et a été jugé conforme aux exigences requises par la norme :

AS9100:D / JISQ 9100:2016 / EN 9100:2018

and is developed on the following locations:
et est déployé sur les sites suivants :

NO. 52, LN. 334, SEC. 3, MINQUAN RD., ZHONGLI DIST., TAOYUAN CITY 320, TAIWAN (R.O.C.)

Issue Date (year/month/day) : *Date d'émission (année/mois/jour)* 2023-05-30

Expiry date : *Date d'expiration* 2026-05-29

Julien NIZRI
Managing Director of AFNOR Certification
Directeur Général d'AFNOR Certification

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11 rue Francis de Pressensé - 93571 La Plaine Saint-Denis Cedex - France - T. +33 (0)1 41 62 80 00 - F. +33 (0)1 49 17 90 00
SAS au capital de 18 187 000 € - 479 076 002 RCS Bobigny - www.afnor.org

國防工業廠商資格評鑑合格證

寶虹電子股份有限公司依「軍事機關委託廠商生產軍品作業規定」參與國防工業廠商資格評鑑經軍備局委託財團法人中衛發展中心評鑑合格。

負責人：李中光
廠址：桃園縣中壢市後寮里龍興路七一五號

合格證有效期間 自 92 年 7 月 13 日起 至 95 年 7 月 12 日止

特給此證 右給

寶虹電子股份有限公司

主管單位：國防部軍備局

受委託專業機關（評鑑單位）：財團法人中衛發展中心

董事長 陳昭邦

中華民國 92 年 6 月 17 日

資評（92）國字第 014 號

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特給此證 右給

寶虹電子股份有限公司

主管單位：國防部軍公民營工業配合發展會報經濟部

受委託專業機關（評鑑單位）：財團法人中衛發展中心

董事長 高辛陽

中華民國 89 年 7 月 18 日

資評（89）國字第 064 號

afaq AFNOR CERTIFICATION

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Certificate

N° 2018/79905.3

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has been assessed and found to meet the requirements of:
a été évalué et jugé conforme aux exigences requises par :

ISO 9001 : 2015

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SAS au capital de 18 187 000 € - 479 076 002 RCS Bobigny - www.afnor.org

2024 Organization

Capital: USD 3.5 Million
R&D Personal: 13
Total Employees: 40

- Chairman
  - GM
    - Consultant
    - R&D
      - Electrical Engineering
      - Firmware Engineering
      - Mechanical Engineering
      - Engineer Supporting
    - Manufacture
      - Manufacture
      - Manufacture Engineering
      - Production Control
    - Material Control
      - Procurement
      - Warehouse
    - Sales and Marketing
      - Marketing
      - Sales
      - Sales Assistant
    - Quality Assurance
      - QA Engineering
      - QC Engineering
      - QE Engineering
      - Safety
    - HR and Administration
      - Accounting
      - Document Control
      - Capital Management

寶虹電子 PCEC
Power-Con Electronics Corporation

Production Facility

ICT

Assembly line

Burn-in

ATE

Main Product Scope

100W ~18000W Military Power Supply

18000W PC-XX18-D

162.5W PC-XX07-0

10W ~ LED Traffic Sign Dimmable Driver

250W Ultraviolet-C Sterilization LED Lighting Intelligent Driver

800Wh ~ 2400Wh Mobile Power Bank for Army (Built-in LiFePO4 Battery)

1200W Rugged Convection Cooled Smart Redundant Power Supply

70W Door Lock Smart Charger

Military Power Supply Feature Design Gallery

Features

- 220Vac or 120/208Vac, 3ψ, 3W+G or Vdc Input
- High Temperature and Humidity Environment
- Protection: SCP/OVP/OCP/OTP
- Voltage Sense Line
- High Reliability: MTBF 100,000 hours min.

Main Applications

- Phased Array Radar System
- Missile Launching System
- Airborne Missile System
- Shipboard Communication System
- Unmanned Aircraft System (UAS)
- Electronic Warfare (EW)
- Power Bank for Ground System

Compliance

- Shock & Vibration per MIL-STD-810G.
- EMI-RFI Per MIL-STD-461G
- (CE101, CE102, RE101, RE102, CS101, CS114,
- CS115, CS116, CS118, RS101, RS103).
- Input Per MIL-STD-704D & MIL-STD-1275D.

Quality Systems

ISO 9001 QUALITY MANAGEMENT SYSTEM

AS9100D CERTIFIED ISO 9001

Military：AC-DC N+1 Redundancy Series

Model No.	Photo	Input Voltage	Output Voltage/Current	Output	Dimension
PC-XX07		120Vac 1 Phase	5V/2.5~25A 75V/0.05~0.5A	162.5W	300*125*127
PC-XX06		120/208Vac 3 Phase	50Vdc/14A	700W	280*203*127
PC-XX05		120/208Vac 3 Phase	5Vdc/220A	1100W	335*203*127
PC-XX28-0		180~264Vac 3 Phase	28Vdc/52A 13.5Vdc/90A (Loading Sharing Hot Swappable)	2671W	482*500*266
PC-XX28-A		180~264Vac 3 Phase	28Vdc/52A 13.5Vdc/90A (Loading Sharing Hot Swappable)	2671W	482*500*266

Military：AC-DC Non-Redundancy Series

Model No.	Photo	Input Voltage	Output Voltage/Current	Output	Dimension
PC-XX01-1A		90~132Vac； 180~264Vac 1 Phase	15Vdc/26.7A； -15Vdc/26.7A； 5Vdc/10A	851W	412*482*142
PC-XX01-1B		90~132Vac； 180~264Vac 1 Phase	15Vdc/26.7A； -15Vdc/26.7A； 5Vdc/10A	851W	412*482*142
PC-XX37-1		190~250Vac 1 Phase	24Vdc/30A； 28Vdc/10A	1000W	400*145*119.3
PC-XX48-1		AC 208V ±10% 1 Phase	28Vdc/30Vdc/ 32Vdc/34Vdc (Selectable by Jumper Adjustment)	1200W	420*136.5*110
MSD-KXX-28-01		110~264Vac	28Vdc/53.6A	1500W	595*483*88
DED-KXX-28-02		115~230Vac	28Vdc/53.6A	1500W	300*250*150

Military：AC-DC Non-Redundancy Series

Model No.	Photo	Input Voltage	Output Voltage/Current	Output	Dimension
PC-XX16-0		110Vac 1 Phase	28Vdc/20A； 25.5Vdc/15A； 13.6Vdc/30A*2	1758W	482*540*80
PC-XX16-A		110Vac 1 Phase	30Vdc/40A	1200W	535*483*60
PC-XX16-B		110Vac 1 Phase	29Vdc/69A	2000W	482*540*89
PC-XX13		208Vac 3 Phase, 47~440Hz	42Vdc/4.16A*16； 24Vdc/12.5A 12Vdc/12.5A*2； -12Vdc/6.25A 5Vdc/20A；-5Vdc/10A	3620.5W	466*466*466
PC-XX18		220Vac 3 Phase	300Vdc/40A； 24Vdc/25A	12000W	482*540*266
PC-XX18-C		220Vac 3 Phase (Dual Input)	300Vdc/50A	15000W	640*482*266
PC-XX18-D		220Vac 3 Phase (Dual Input)	300Vdc/60A	18000W	591*482*266

Military：DC-DC Isolated Series

Model No.	Photo	Input Voltage	Output Voltage/Current	Output	Dimension
MVM-95-12-7K		18~33Vdc	12V/5.0A；3.3V/0.2A；12V/0.05A；5.5V/4A；3.3V；3A；-5V/0.05A；3.3V/0.2A	95W	135*135*13
PC-XX40-2		24 ~ 32Vdc	5V/6A；18V/0.5A；12V/0.5A；0.985V/7A；0.985V/4A；0.985V/3A；12V/2A；5V/1A	87W	207*90*40
PC-XX42-1		Dual Input Power 17~39Vdc	28Vdc/2A；28Vdc/2A；15Vdc/1A；-15Vdc/1A；12Vdc/3.1A；12Vdc/3.1A；5Vdc/3A；28Vdc/0.4A	243W	Outline Diameter 190, High 43
PC-XX40-1		24~32Vdc	5V/6A；28V/3A；12V/2A；18V/0.5A；28V/2A；5V/1A；12V/0.5A；28V/2A	270W	150*90*40
PC-XX30-4		240~360Vdc	24Vdc/41.7A；28Vdc/35.7A；30Vdc/33.3A；32Vdc/31.3A	1000W	400*145*106

Military：DC-DC Isolated Series

Model No.	Photo	Input Voltage	Output Voltage/Current	Output	Dimension
PC-XX30-1		300Vdc	32Vdc/23A or 50Vdc/23A	1160W	400*145*120
PC-XX30-2		300Vdc	30Vdc/38A or 24Vdc/48A or 28Vdc/41A	1160W	400*145*120
PC-XX27		18~36Vdc	28Vdc/67.85A； -28Vdc/14.2A	2300W	483*300*430

Military：Power Bank Series

Model No.	Photo	Input Voltage	Output Voltage/Current	Output	Dimension
PC-XX49-1		90~264Vac	24~30Vdc (Six Outputs)	30Ah max	350*300*200
PC-XX45-1		90~264Vac	24~28Vdc	100Ah max	400*350*220

寶虹電子 PCEC
Power-Con Electronics Corporation

New!

Military 95W Miniature DC-DC
7 Isolated Outputs Power Supply
MVM-95-12-7K Series

AS9100D CERTIFIED ISO 9001

Main Features

* Approved to MIL-STD-1275D/ 810G/ 461G/704F
* Conduction Cooled
* Operating Temp: -55°C to 85°C
* Pass 75G Gun Fire Mechanical Shock
* Digital Controls and Sense
* Vin: 18 ~ 70Vdc (Optional)
* Vout: 3.3/ 3.3/ 3.3/ 5/ -5/ 12/ 12Vdc (Floating)
* External Sync. Capability/ Synchronize Lock
* Internal Switching Frequency: 300kHz
* EMI Filters Included
* Reverse Input Polarity
* Sleep Indicator/ Remote Inhibit (on/off)
* Modified Off-the-Shelf Solutions

Low Profile Size –
13 mm (H) * 135 mm (L) * 135 mm (W)

Applications

* Military Airborne/ Ground-Fix/ Shipboard
* Ruggedized Telecom
* Industrial Power Supply

1200W Rugged Convection Cooled Smart Redundant Power Supply PC-FP07

Features

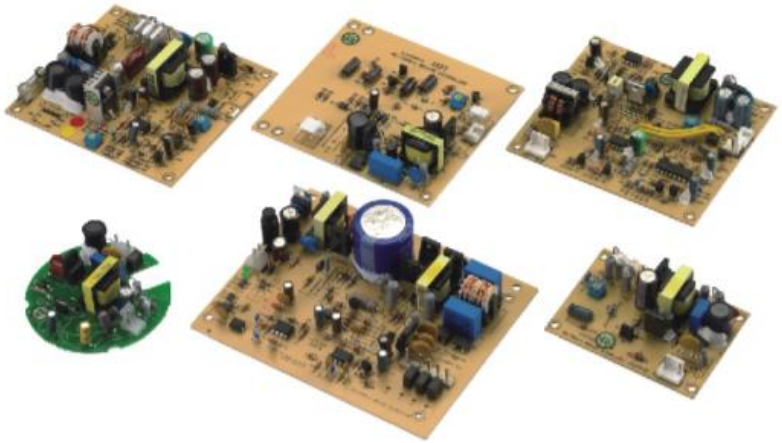
* Vout: +24Vdc
* Dual AC Input: 90 ~ 264Vac
* USB 2.0 Interface
* 2U Height & 19“ Rack Mount
* Convection Cooled and Long Lifetime
* AC ok/ DC ok/ Alarm/ Life LED indication
* Hot Swappable and Easy to Install; Active Current Share
* Protection: OVP/ OCP/ SCP/ OTP and Alerted by Dry Contact
* I^2C Controlled Power Module Sequenced Remote Monitoring
* 3+1 Redundancy 900W Output; Peak Power 1800W @ 300 Sec duration
* Size: 300mm(L) * 485mm 19”(W) * 133mm 3U(H)

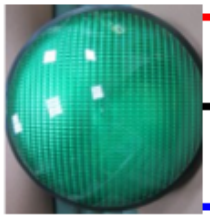
LED Traffic Sign Power Supply

LED Traffic Signal

Features

- I/P Voltage range: 18-50 Vac or 80-135 Vac or 180-265 Vac
- Open Frame
- Built-in constant current limiting circuit
- Adjustable output voltage and current level
- Protection: SCP/OVP/OCP
- Built-in active PFC function, PF>0.92
- Operation temperature: -40 ~ +74° C
- High reliability: MTBF 100,000 hours min.
- 2 years warranty



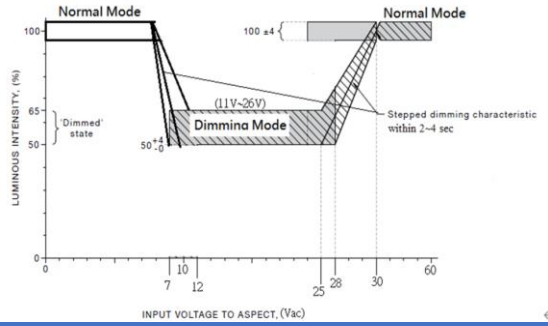


Optional Functions

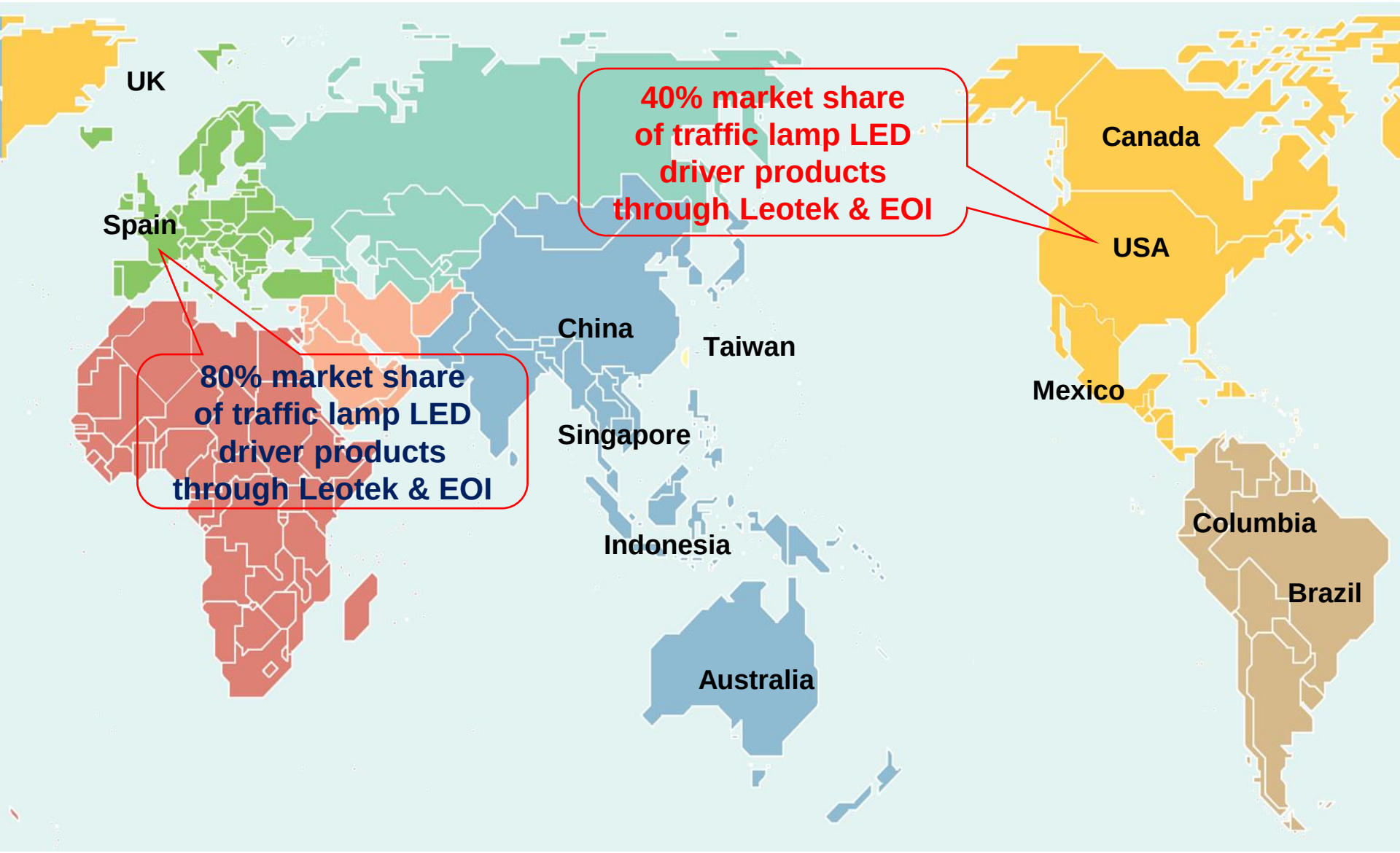
- Low input voltage cut off
- Input voltage dimming
- Fail-state
- Hold-up time > 0.5 sec.
- Signal conflict monitor compatibility (10Vrms)

Compliance

- FCC Part 15.107 CLASS A
- FCC Part 15.109 CLASS A
- Surge: IEC 61000-4-5
- NEMA TS-2 in section 2.1.6 and 2.1.8, 2003
- EN50293 (I/P Voltage range: 18-50 Vac and 180-265 Vac)
- Meet U.S. ITE standard (Institute of Transportation Engineers)



LED Driver Series Market Share



224W Intelligent Control UV-C Sterilization 8 Outputs LED Driver (Custom)

Features

- 90 ~ 264 Vac Input Range
- Equipped RS485 Communication Port for:
  * Output Voltage/ Output Current/ Temp Real Time Monitoring
  * Data Log/ Timer
- Digital Display Timer
- Output Voltage Range: 12 ~ 40Vdc
- Max Output Current: Up to 700mA (8 Outputs)
- 8-Channel LED Warning Indicator
- AC Power Indicator & Switch
- IP67 Ingress Protection
- Dimensions：300 * 190 * 90 mm (L * W * H)

Applications

- **UV-C Sterilization Lighting**
- Skyscraper Lighting
- Street Lighting
- Floodlight Lighting
- Stage Lighting
- Fishing Lighting
- Horticulture Lighting
- Bay Lighting

AS9100 Certified Custom Power Capability

Mechanical & Electrical Design

- 3D-model
- Thermal, stress simulation
- Environmentally sealed units
- I2C interface
- Embedded MCU/DSP based design
- Schematic capture / simulation
- Compliance with defense specifications

PCB Design & Software Programming

- PCB modeling & layout
- In-house software / firmware development
- Serial bus interfaces - I2C & RS485
- Firmware functionality
  - CANBus
  - Battery charging
  - Power supply alarm and control

Safety Compliance, Quality & Testing

- IT, industrial and medical safety standards
- MIL-STD and DEF-STAN EMC compliance
- 100% parametric DVT testing

Custom Power Benchmark

3KWh Mobility ESS Moving Car

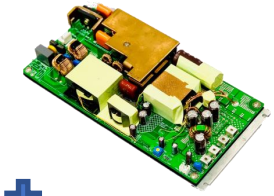
1.5KW AC-DC Smart Fast Charger

LiFePO4 Battery

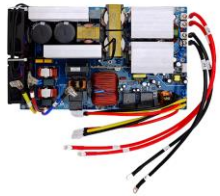
BMS

MCU

Multiple DC Outputs

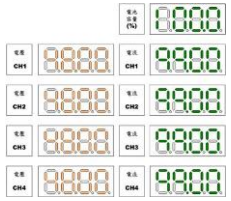


On-Line AC UPS



Human-Machine Interface Monitoring

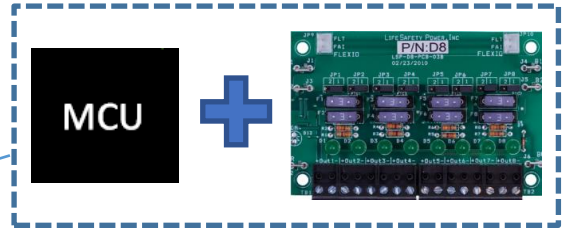
Battery Status Display



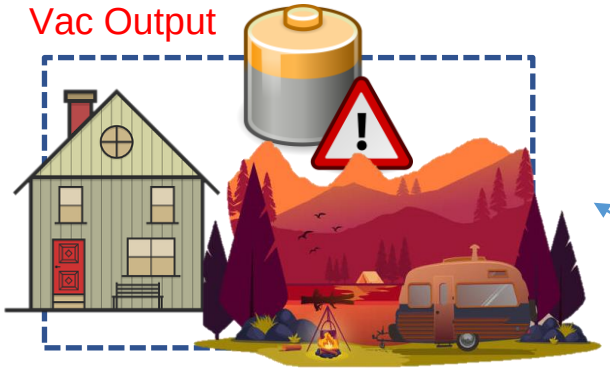
Custom Power Benchmark

Energy Storage Dynamotor Power System

MCU Control Board



Vac Output



DC – AC Inverter

PCEC 240W AC – DC Smart Charger

Vdc Output

(USB / Type C)

Battery

Custom Power Benchmark

Power Supply + Smart Battery Charging Unit for FRTU System

PCEC 204W Power Supply + Smart Battery Charging Unit

Battery

Charging / Activation

Brushless Motor Load

RS-485
(Battery Management System)

D-Sub port

LED Indicator

- AC Power (Green LED)
- AC Error (Red LED)
- DC Power (Green LED)
- DC Error (Red LED)
- Ground
- High Battery
- Low Battery

Feeder Remote Terminal Unit

Custom Power Benchmark

Solar Energy Smart Street Light/Traffic Light Application

Development Technology Concept：

1. The conversion efficiency of solar panels is up to 40%.
2. LED lamp power efficiency increased to 90%.
3. Power consumption of traffic lights <6W; Power consumption of street lights <30W

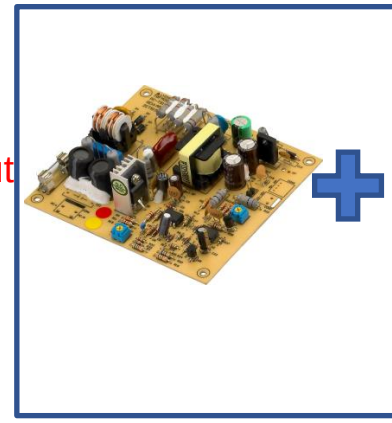
Human-Machine Interface Control Console

RS-485 Laptop PC

LED Driver + Charge + Controller (MCU)

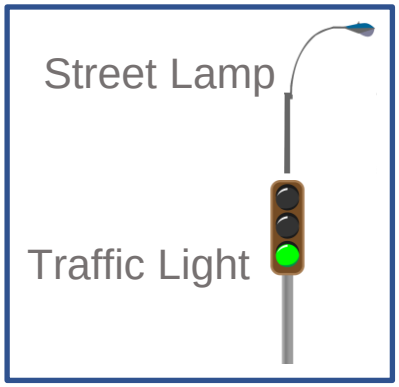
PV Solar Panel

Vdc Input



Vdc Output

LED Lighting



Vdc charge

Battery

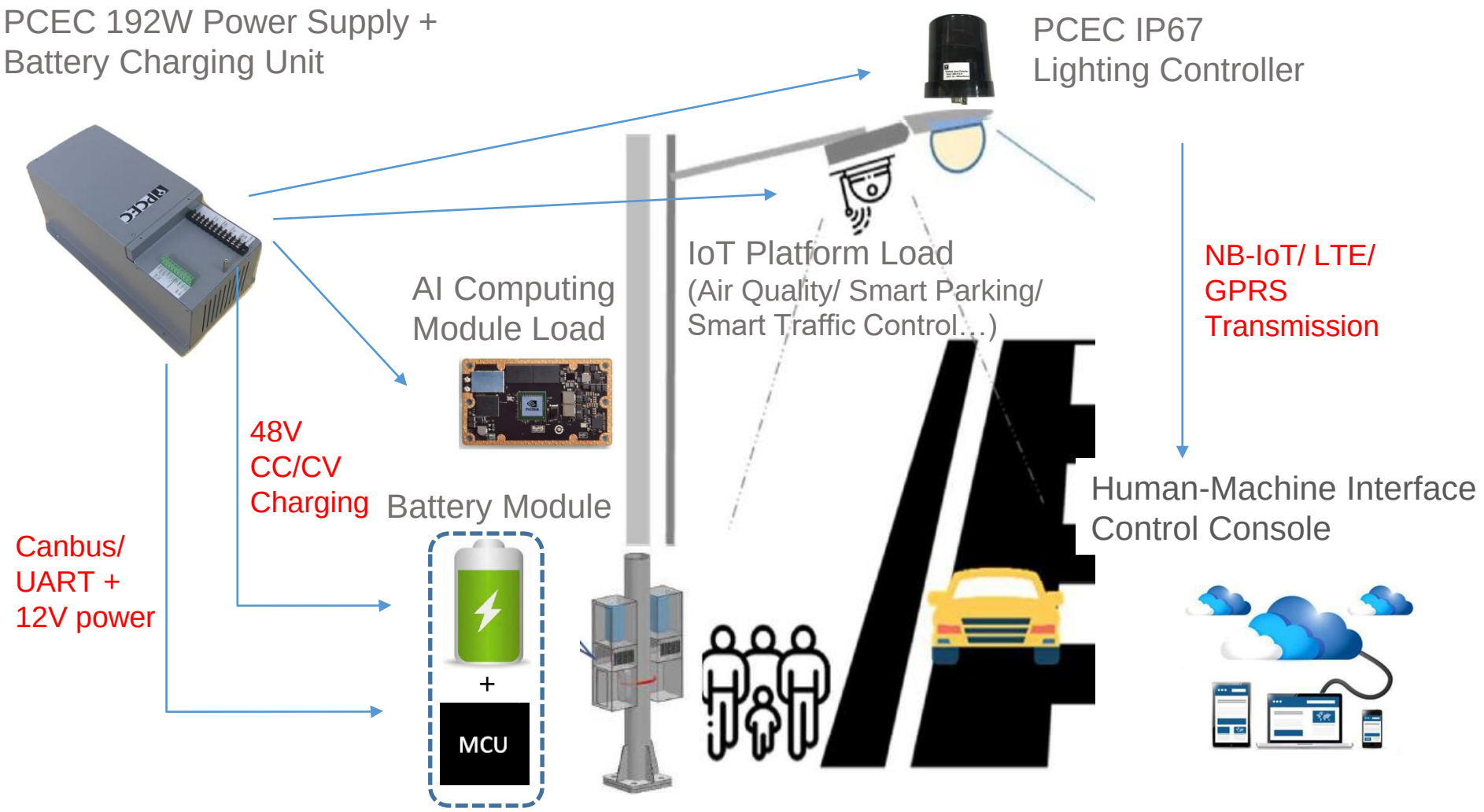
D-Sub Port

Function Signal

- Vdc In/Out (Green LED)
- Vdc In/Out Error (Red LED)
- Vdc charge (Green LED)
- Vdc charge Error (Red LED)
- Ground
- High Battery
- Low Battery

Custom Power Benchmark

Power Supply + Battery Charging Unit for Smart City Application (Intelligent Street Lighting + IoT Controls + 5G Cell Energy Storage System)

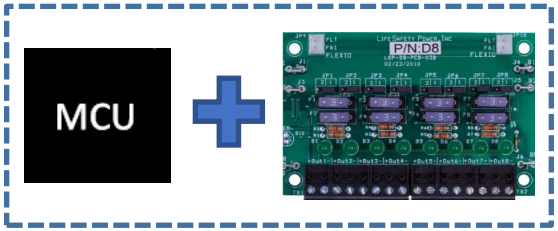


Custom Power Benchmark

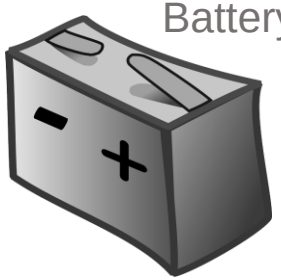
Access Control System Applications

PCEC 70W Power Supply
Smart Charger

MCU + Power Distribution Board



Battery



2024 Main Customers

Industrial

- 台塑關係企業 Formosa Plastics Group
- NKFG
- Brilliant Info Corp. The future is now.

LED Traffic Lamp

- 聯嘉光電股份有限公司 聯嘉光電集團
- LEOTEK LITE-ON GROUP
- SoBright Lighting the Future
- 竹堃實業有限公司 TEXEN CO., LTD

Military

- 國家中山科學研究院 CHUNG-SHAN INSTITUTE OF SCIENCE & TECHNOLOGY
- IAI
- TelGaAs INC.

Joint Venture Partnership

Date	News & Events
2017/Q2	Joint venture by EOI (Excellence Opto Inc); Taiwan Stock Exchange listed company; https://www.eoi.com.tw/

Excellence Optoelectronics Inc. (EOI), is a high technology-oriented company and located in the Science- Based Industrial Park in Hsinchu,Taiwan. Since 1996, EOI has won many awards and patents in the fields of LED and Laser. As an ISO9001, QS9000 and TS16949 certified company, we guarantee that our products are of high quality and high performance.

EOI is a professional LED lamp manufacturer producing top quality of Super High Brightness LED lamps with AlInGaP and InGaN chip materials. With our strong capabilities in optical, mechanical, electrical designs and precision measurement, we are able to supply high efficiency LED components and modules to meet our customers' requirements, and to serve the customers with total technical solutions. To increase our customers' competitive abilities is always our major goal. Therefore, we continuously devote ourselves in innovative and leading technology of LED and cost down process.

寶虹電子 PCEC
Power-Con Electronics Corporation

Power-Con Electronics Corp.
寶虹電子股份有限公司

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Chungli Section, Taoyuan City 320,
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