



財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

(Certificate No : L2618-231015)

This is to certify that

Taiwan Testing and Certification Center
Environmental and Reliability Testing Laboratory

No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria : ISO/IEC 17025:2017 ; CNS 17025:2018

Accreditation Number : 2618

Originally Accredited : November 28, 2012

Effective Period : November 28, 2021 to November 27, 2024

Accredited Scope : Testing Field, see described in the Appendix

Specific Accreditation Program : Accreditation Program for Designated Testing Laboratory
for Commodities Inspection



Scan to verify

Ching-Chang Lien

Ching-Chang Lien
President, Taiwan Accreditation Foundation
October 15, 2023

Accreditation Number : 2618

Laboratory Head : HUNG, Hermes

17.94 Metrical Instrument

Nonautomatic Weighing Instrument (electronics)

E998 Legal Metrology Instrument Pattern Approval

CNPA-76

(Excluded Appendix Performance tests disturbances, Short time power reductions, Bursts, Electrostatic discharge,

Immunity to radiated electromagnetic fields)

Weighing performance test: max. 300 kg

Temperature test: -10 °C to +40 °C

Temperature effect on no-load indication test

Damp heat, Steady state: (40 to 85) %RH

Tilting test,

Variations of Voltage test: max. 310 V, 50/ 60 Hz.

Endurance test, Discrimination test, Repeatability test, Span stability test, Warm-up time test, Eccentricity test, Zero Return test, Creep test,

Stability of equilibrium test, Tare test,

Approval Signatory: WU, Joy; HUNG, Hermes; LAI, Jacky

17.98 Metrical Instrument

Electronic taximeter

E998 Legal Metrology Instrument Pattern Approval

CNPA-21 (Exclude sections Power noise disturbance test,

Voltage test, Static electricity test, Electromagnetic wave disturbance test (EMI), Electromagnetic wave radiation endurance test (EMS))

CNS 12626 (Only Sound level test, Temperature test, Temperature and Humidity test, Vibration test, Impact test)

Volume test: Range of peak value: (60 to 90) dB (A)

Temperature characteristic test: -5 °C to +60 °C

Low temperature test: -10 °C

High temperature test: +70 °C

Temperature cycling test: -5 °C to +60 °C

Temperature & humidity test: +25 °C to +65 °C, (20 to 95) %RH

Resonant frequency test, Vibration characteristic test,

Vibration fatigue test

Sweep vibration fatigue test:

Frequency: 5 Hz to 200 Hz

Amplitude: 0.5 mm to 2 mm

Acceleration: 1 g to 3 g

Shock test: half-sine (30 g, 10 ms to 20 ms)

Approval Signatory: CHOU, Antony; HUNG, Hung-Wei; HUNG, Hermes

18.01 Commodity

5G Smart pole system

E003 Low temperature operating test

High temperature operating test

P2, total 17 pages



Temperature & humidity test
Solar test
Vibration test
Salt spray test
Temperature cycling test
Temperature & humidity cycling test
Corrosion Test
5G Smart Pole System Technical Specification–Part 4: Environmental reliability requirements
5G Smart Pole System Technical Specification–Part 3: Installation and structure-related safety requirements and test methods
5G Smart Pole System Technical Specification–Part 1: General requirements
Part 4: Excluded IP testing/wind tunnel test,
Vibration test Exclude GR-63-CORE Zone4 test
Part 3: Only corrosion test

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

■ 19.02 Electronic and Electric

Mobile phone charger by alternative current power supply for traveling use

E003 Reliability

CNS 15285 Appendix B (Universal charger solution by mobile terminals-Basic architecture, Universal charger solution and cable)

Voltage Drop: 300 Vac max./380 Vdc max., 10 A max., 100 MΩ max.

Average charging efficiency: 300 Vac max./380 Vdc max..10 A max.

Approval Signatory: LIN, Gary; HUNG, Hung-Wei; HUNG, Hermes

■ 19.02 Electronic and Electric

Electric Component Connector

E003 Discontinuities test

EIA 364-46

Discontinuities: 99.9 μs max.

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei

■ 19.02 Electronic and Electric

Electric & Electronic Products-Electric Component

E003 Impedance Test (ESR)

CNS 4856

JIS C 5101-1

Test Frequency Range: 20 Hz to 1 MHz

Test Voltage Range: 5 mV to 2 V (r.m.s.)

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

E003 Leakage current test

CNS 4856, JIS C 5101-1

Current Range: 10 μA to 5 mA

Voltage Range: 6.3 Vdc to 630 Vdc

Approval Signatory: LIN, Gary; HUNG, Hung-Wei



E003 Resistance test
CNS 4899
JIS C 5201-1
IEC 61196-1-101
MIL-STD-202-Method 303
Range of Resistance: 2 k Ω max.

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

E003 V.S.W.R. Test
IEC 61196-1-112
IEC 60512-25-7
Test Frequency Range: 300 kHz to 20 GHz

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

19.02 Electronic and Electric
Electric & electronic products (include components)
E025 Attenuation test
EIA 364-101
IEC 61196-4
Bandwidth: 300 kHz to 20 GHz

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

E025 Characteristic Impedance test
EIA 364-108
IEC 61196-1-108
Bandwidth: 20 GHz (max.)
Reflected rise time: 22 ps min

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

E025 Return loss test
EIA 364-108
IEC 61196-1-112
Bandwidth range of testing frequency: 300 kHz to 20 GHz

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

19.02 Electronic and Electric
Electric & electronic products (include Components)
E025 Insertion loss test
IPC-TM-650 Number 2.5.5.14
Bandwidth: 40 GHz (max.)

Approval Signatory: HUNG, Hung-Wei; HUNG, Hermes

19.05 Electronic and Electric
Secondary cells and batteries, Power bank
E001 Safety
CNS 14857-1
P4, total 17 pages



IEC 61959

Charge/discharge test: 20 Vdc max., 40 A max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Charge/discharge test: 100 Vdc max., 150 A max.

(Testing location: No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Vibration test, Free fall test

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

E001 Safety

CNS 14857-2 (Excluded ESD)

IEC 61960 (Excluded ESD)

Discharge performance test

Charge (capacity) retention and recovery

Charge (capacity) recovery after long term storage test

Endurance in cycles

20 Vdc max., 40 A max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

100 Vdc max., 150 A max.

(Testing location: No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Battery internal resistance: DC 100 mΩ max., AC 300 mΩ max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

E001 Safety

CNS 15364 (Excluded Forced internal short circuit (Cell) test)

IEC 62133 (Excluded Forced Internal Short Circuit (Cell) test)

IEC 62133-1

IEC 62133-2 (Excluded Forced Internal Short Circuit (Cell) test)

CNS 62133-1

CNS 62133-2 (Excluded Forced Internal Short Circuit (Cell) test)

Insulation resistance test, Vibration test,

Thermal shock test, Free fall test,

Mechanical shock test, Low pressure test

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist.,

Taoyuan City, Taiwan)

Charge/discharge test, Continuous low-rate charging, Moulded ease stress at high ambient temperature, Incorrect installation Short-circuit test, Thermal shock test, Crushing of cells, Overcharge test, Forced discharge

20 Vdc max., 40 A max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist.,

Taoyuan City, Taiwan)

100 Vdc max., 150 A max.

(Testing location: No.64, Wenming Rd., Guishan Dist.,

Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

P5, total 17 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



19.05 Electronic and Electric

Secondary batteries for the propulsion of electric road vehicles

E001 Discharge performance test

CNS 6038

CNS 15369-1

CNS 15369-2

CNS 15369-3

CNS 15391-1

IEC 61982-1

IEC 61982-2

IEC 61982-3

IEC 62660-1

20 Vdc max., 40 A max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

100 Vdc max., 200 A max.

(Testing location: No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

19.05 Electronic and Electric

Secondary lithium batteries for electric motorcycles

E001 Safety

CNS 15387

Insulation resistance test, Withstanding voltage test, Mechanical shock test, Drop test, Vibration test, Thermal stress test, Thermal shock test, Temperature and humidity test

20 Vdc max., 40 A max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist.,

Taoyuan City, Taiwan)

Charge/discharge test, Crush test, Overcharge test, Short-circuit test, Part Short-circuit test, Unbalance test (Imbalance test)

160 Vdc max., 150 A max.

(Testing location: No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

19.05 Electronic and Electric

Stationary battery system for Electric motorcycles

E001 Safety

CNS 15424-2

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

19.05 Electronic and Electric

Removable battery system for Electric motorcycles

E001 Safety

CNS 15424-1

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy



19. 05 Electronic and Electric

Lithium metal and lithium

ion batteries

E001 Safety

UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Section 38.3 (UN 38.3)

IEC 62281

20 Vdc max., 40 A max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

160 Vdc max., 150 A max.

(Testing location: No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

19. 99 Electronic and Electric

Secondary cells and batteries

E003 Endurance in cycles test

IEC 61951-2

CNS 15369-1

CNS 15369-2

CNS 15369-3

CNS 15391-1

IEC 61982

20 Vdc max., 40 A max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

100 Vdc max., 150 A max.

(Testing location: No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

19. 99 Electronic and Electric

Electric & electronic products

E003 Power voltage change rate test

CNS 14546

EN 50155

IEC 60571

IEC 60945

CNS 10205

CNS 10522

Voltage Range: 310 Vac (max.) , 700 Vdc (max.)

Frequency Range: 1 KHz (max.)

Approval Signatory: WU, Joy; CHOU, Antony; HUNG, Hung-Wei; LAI, Jacky

E003 Salt Spray test

CNS 3627

CNS 12874

IEC 60068-2-11

IEC 60945

IEC 60068-2-52 (excluded Test Method 8)

IEC 60571

MIL-STD-202 Method 101

P7, total 17 pages



CNS 8886 NSS Test
ASTM B117
ISO 16750-4
ISO 9227 NSS Test
MIL-STD-810 Method 509
EN 50155
JIS Z2371: 2000 Neutral Salt spray test
EIA 364-26
Temperature: (35 to 45) °C
Concentration: (5±1) %
Chiller: (-90 to 220) °C

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei; LAI, Jacky

E003 Low temperature test
IEC 60068-2-1
IEC 60571
IEC 60721-3
IEC 60870-2-2
IEC 60945
IEC 61850-3
EN 50155
MIL-STD-810 Method 502 Procedure I/II
CNS 11233
JIS-C-0020
EIA-364-59
ISO 16750-4
Temperature: (0 to -70) °C
Chiller: (-90 to 220) °C

Approval Signatory: WU, Joy; CHOU, Antony; HUNG, Hung-Wei; LAI, Jacky

E003 Low air pressure test
IEC 60068-2-13
IEC 60721-3
IEC 60870-2-2
CNS 11236
MIL STD 810 Method 500 Procedure I/II
Temperature: (-65 to +150) °C
Pressure: 4.5 kPa (max.)

Approval Signatory: WU, Joy; CHOU, Antony; HUNG, Hung-Wei; LAI, Jacky

E003 Free fall test
IEC 60068-2-31
IEC 60721-3-2
IEC 60721-3-7
IEC 60870-2-2
IEC 60945
IEEE 1613
MIL-STD-810 Method 516 Procedure IV
ISO 16750-3
Height: (30.5 to 182.9) cm
Chiller: (-90 to 220) °C

Approval Signatory: WU, Joy; CHOU, Antony; HUNG, Hung-Wei; HSIAO, Andy

P8, total 17 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



E003 Dissipation factor test
JIS C-5101-1
CNS 4856
CNS 3432
CNS 13198
Range of testing frequency: 20 Hz to 1 MHz
Range of testing signal voltage: 5 mV to 2 V (r.m.s.)

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

19.99 Electronic and Electric
Electric & Electronic Products
E003 Accelerated reliability (life) testing-Elevated temperature and humidity
IEC 62059-31-1
(-70 to +150) °C
(20 to 98) %RH

Approval Signatory: WU, Joy; HUNG, Hermes

19.99 Electronic and Electric
Electric & electronic products (include Components)
E003 Coating thickness measurement
ASTM B 487
ASTM B 568
ISO 3497
CNS 12114
1.Thickness Instrument:
Operating voltage: 50 kV
Measurement: (0~1.51) μm (Au) , (0~9.7) μm (Ni) , (0~24.6) μm (Sn) , 0.94 μm (23Pd, 77Ni)
Single layer to trilayers thickness
2.Microscope Instrument: 0 to 1000 μm

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

E003 Solar Radiation test
IEC 60068-2-5
MIL-STD 810 METHOD 505 Procedure II
DIN 75220
Temperature: (-70 to +180) °C
Humidity: (10 to 90) %RH
Solar radiation: 600~1200 W/m²
Spectral Irradiance: 280 to 3000 nm

Approval Signatory: WU, Joy; HUNG, Hung-Wei; LAI, Jacky

19.99 Electronic and Electric
Electric & electronic products (include components)
E003 Temperature rise test
CNS 8267
CNS 10905
CNS 15285
ISO 13063
EIA 364-70
P9, total 17 pages



DC: 100 A (max.) , 160 V (max.)
AC: 310 V, 40 A, 50/60 Hz
Temperature: +400 °C (max.)

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei; HSIAO, Andy

E003 Insertion & Withdrawal force tests (Durability)
EIA 364-05
EIA 364-13
Rate of speed range: 1000 mm/min (max.)
Load cell range: 200 kgf (max.)

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei

E003 Contact resistance measurement test
EIA 364-06
EIA 364-23
MIL-STD-202 Method 307
Range of resistance: 20 k Ω (max.)

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei; HSIAO, Andy

E003 Insertion & Withdrawal Life tests (Durability)
EIA 364-09
Max.displacement travel: 35 mm
Max.rate of cycles: 2040 cycles/hour

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei; HSIAO, Andy

E003 Critical Dimension
EIA 364-18
CNS 15391-1
CNS 15620-1
Dimensional Inspection: 360 cm (max.)

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei; HSIAO, Andy

E003 Withstanding voltage test
EIA 364-20
MIL-STD-202 Method 301
UL 2271
IEC 60255-27
IEC 60571
IEC 60945
IEC 61850-3
IEC 61196-1
EN 50155
Test voltage range: (50 to 5000) Vac, (50 to 6000) Vdc
Cut current range: AC 30 mA (max.) , DC 10 mA (max.)

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei; LAI, Jacky



E003 Insulation resistance test

EIA 364-21

MIL-STD-202 Method 302

UL 2271

IEC 61196-1

IEC 60255-27

IEC 60571

IEC 60945

IEC 61850-3

EN 50155

Test voltage range: (100 to 1000) Vdc

Range of Resistance: (1 M, 10 M, 100 M, 1 G, 10 G, 100 G, 1 T, 10 T) Ω

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei; LAI, Jacky

E003 Capacitance test

EIA 364-30

MIL-STD-202 Method 305

CNS 3432

CNS 4856

CNS 13198

Test frequency range: 20 Hz to 1 MHz

Test signal level range: 5 mV to 2 V (r.m.s.)

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

E003 Cable pull-out test

EIA 364-38

Load cell range: 500 kgf (max.)

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei

E003 Cable Flex test

EIA 364-41

Flex angle range: 180° (max.)

Flex rate of speed Max.: 20 cycles/min

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei

E003 Mixed Flowing Gas test

EIA 364-65

IEC 60068-2-42

IEC 60068-2-43

IEC 60068-2-60

ISO 16750-4

Range of concentration:

SO₂: 5 ppb to 50 ppm

H₂S: 50 ppb to 25 ppm

NO₂: 50 ppb to 5 ppm

CL₂: 25 ppb to 250 ppb

O₃: 5 ppm (max.)

Range of temperature: (+25 to +50) °C

Range of humidity: (70 to 95) %RH

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei; HSIAO, Andy



E003 Temperature cycling test

IEC 60068-2-14 Test Na, Nb

IEC 60721-3

IEC 60870-2-2

IEC 61850-3

MIL-STD-810 Method 503

CNS 3633 Na, Nb

JIS C-0025 Na, Nb

EIA 364-32

MIL-STD-202-107

ISO 16750-4

Temperature: (-70 to +180) °C

Rate of temperature change: 10 °C/min (max.)

(Testing location: No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Temperature: (-70 to +150) °C

Rate of temperature change: 20 °C/min (max.)

Temperature: (-70 to +180) °C

Rate of temperature change: 5 °C/min (max.)

Chiller: (-90 to 220) °C

(Testing location: No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; LIN, Gary; HUNG, Hung-Wei; LAI, Jacky

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

E003 Dry heat test

IEC 60068-2-2

IEC 60571

IEC 60721-3

IEC 60870-2-2

MIL-STD-810 Method 501

CNS 3634

JIS C-0021

EIA 364-17

MIL-STD-202-108

ISO 16750-4

IEC 62660-2

IEC 61850-3

IEC 60945

EN 50155

Temperature: +500 °C (max.)

Chiller: (-90 to 220) °C

Approval Signatory: WU, Joy; CHOU, Antony; HUNG, Hung-Wei; LAI, Jacky

E003 Shock test

IEC 60068-2-27

IEC 60255-21-2

IEC 61373

IEC 60571

IEC 60721-3

IEC 60870-2-2

IEC 61850-3

MIL-STD-202 Method 202

MIL-STD-202 Method 205

MIL-STD-810 Method 516 Procedure I/II

CNS 11234

P12, total 17 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



JIS C-0041
EIA 364-27
ISO 16750-3
EN 50155
Half-sine:
(3 g to 500 g) /2 to 30 ms
Sawtooth:
(20 g to 75 g) /6 to 11 ms
Chiller: (-90 to 220) °C

Approval Signatory: WU, Joy; CHOU, Antony; HUNG, Hung-Wei; HSIAO, Andy

E003 Temperature humidity test

IEC 60068-2-30
IEC 60068-2-38
IEC 60068-2-78
IEC 60571
IEC 60721-3
IEC 60945
IEC 61850-3
EN 50155
CNS 12566
JIS C-0033
EIA 364-31
MIL-STD-202 Method 106
MIL-STD-810 Method 507
ISO 16750-4
Temperature: (-70 to +180) °C
Humidity: (5 to 98) %RH
Chiller: (-90 to 220) °C

Approval Signatory: WU, Joy; CHOU, Antony; HUNG, Hung-Wei; LAI, Jacky

E003 Vibration test

IEC 60068-2-6
IEC 60068-2-64
IEC 60721-3
IEC 60870-2-2
IEC 61373
IEEE 1613
MIL-STD-202 Method 214
MIL-STD-810 Method 514
CNS 3629
GR-63-CORE
JIS C-0040
EIA 364-28
IEC 60255-21-1
IEC 60945
IEC 61850-3
EN 50155
MIL-STD-810 Method 514 Procedure I (category 4, 7, 10, 11, 12, 16, 17, 18, 19, 21, 24) /
Produce III category 6)
Frequency: 5 Hz to 2 kHz
Amplitude: 250 mm (max.)
Output: 3000 kg (max.)
Chiller: (-90 to 220) °C

Approval Signatory: WU, Joy; CHOU, Antony; HUNG, Hung-Wei; HSIAO, Andy
P13, total 17 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



20. 21 Information Technology and Communication
Monochromatic Copy Machines, Multi-function Devices, Printers, Plain-Paper Facsimile Machines, Monitors, Portable Projectors, Personal computers, Notebook Computers, Desktop Personal Computers, Scanners, Digital Duplicators

E005 Energy Efficiency

Green Procurement Regulation 1.0.0

Rated Voltage of test: 110 V, 220 V, 40 A

Rated Frequency of test: 60 Hz (max.)

Approval Signatory: WU, Joy; HUNG, Hermes; LAI, Jacky

22. 05 Transportation Equipment

Stationary a.c. and d.c. conductive power supply systems for electric motorcycle

E001 Safety

CNS 16125

(Excluded EMC)

480 Vac max., 120 Vdc max.

CNS 16125 (Excluded Resistance to tracking, UV test)

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

CNS 16125 (Only Resistance to tracking, UV test)

(Testing location: No.555, Sec. 2, Wenhua 3rd Rd., Linkou Dist., New Taipei City 244, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; YANG, Andy; HSIAO, Andy; XIZO, Simon

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan, R.O.C.; 2.No. 555, Sec. 2, Wenhua 3rd Rd., Linkou Dist., New Taipei City 244, Taiwan (R.O.C.)

E002 EMC

CNS 16125

Only EMC (Ch. 5.14)

Approval Signatory: LIN, Kevin; CHEN, Licher; HUANG, Jerry

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan, R.O.C.; 2.No. 34, Lin 5, Dingfu, Linkou Dist., New Taipei City 24442, Taiwan (R.O.C.)

22. 05 Transportation Equipment

Stationary a.c and d.c. conductive power supply systems for electric motorcycle--Battery swapping system

E001 Safety

CNS 16126

480 Vac max., 120 Vdc max

CNS 16126 (Excluded Resistance to tracking, UV test)

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

CNS 16126 (Only Resistance to tracking, UV test)

(Testing location: No.555, Sec. 2, Wenhua 3rd Rd., Linkou Dist., New Taipei City 244, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; YANG, Andy; HSIAO, Andy; XIZO, Simon

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan, R.O.C.; 2.No. 555, Sec. 2, Wenhua 3rd Rd., Linkou Dist., New Taipei City 244, Taiwan (R.O.C.)



■ 25. 23 Fire Protection Equipment

Emergency Public Address Equipment (Include emergency telephone mainframe operate device)

A003 Sound device audio pressure test

CNS 10522

Frequency: 20 Hz to 20 kHz

Approval Signatory: WU, Joy; HUNG, Hermes; LAI, Jacky

■ 25. 23 Fire Protection Equipment

Emergency Public Address Equipment (Include emergency telephone mainframe operate device)

E001 Emergency Public Address Equipment review and approval items

CNS 10522

Voltage Range: 264 Vac (max.)

26.4 Vdc (max.)

Approval Signatory: WU, Joy; HUNG, Hermes; LAI, Jacky

**Accreditation Program for Designated Testing Laboratory for
Commodities Inspection**

■ 18. 01 Commodity

5G Smart pole system

E003 Low temperature operating test

High temperature operating test

Temperature & humidity test

Solar test

Vibration test

Salt spray test

Temperature cycling test

Temperature & humidity cycling test

Corrosion Test

5G Smart Pole System Technical Specification–Part 4: Environmental reliability requirements

5G Smart Pole System Technical Specification–Part 3: Installation and structure-related safety requirements and test methods

5G Smart Pole System Technical Specification–Part 1: General requirements

Part 4: Excluded IP testing/wind tunnel test, Vibration test Exclude GR-63-CORE Zone4 test

Part 3: Only corrosion test

Approval Signatory: LIN, Gary; HUNG, Hung-Wei

■ 19. 05 Electronic and Electric

Secondary cells and batteries, Power bank

E001 Safety

CNS 15364 (2013) (Excluded Forced internal short circuit (Cell) test)

Insulation resistance test, Vibration test,

Thermal shock test, Free fall test,

Mechanical shock test, Low pressure test

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Charge/discharge test, Continuous low-rate charging, Moulded ease stress at high ambient temperature, Incorrect installation Short-circuit test, Thermal shock test, Crushing of cells,

Overcharge test, Forced discharge

P15, total 17 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



20 Vdc max., 40 A max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

100 Vdc max., 150 A max.

(Testing location: No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

19.05 Electronic and Electric

Secondary lithium batteries for electric motorcycles

E001 Safety testing method for secondary lithium batteries for electric motorcycles

CNS 15387 (2015)

Insulation resistance test, Withstanding voltage test, Mechanical shock test, Drop test,

Vibration test, Thermal stress test, Thermal shock test, Temperature and humidity test

20 Vdc max., 40 A max.

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Charge/discharge test, Cruch test, Overchange test, Short-circuit test, Part Short-circuit test,

Unbalance test (Imbalance test)

160 Vdc max., 150 A max.

(Testing location: No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan,

R.O.C.; 2.No.64, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan

19.05 Electronic and Electric

Stationary battery system for Electric motorcycles

E001 Electric motorcycles battery system - Part 2: The safety requirements of stationary battery system

CNS 15424-2 (2015)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

19.05 Electronic and Electric

Removable battery system for Electric motorcycles

E001 Electric motorcycles battery system - Part 1: The safety requirements of removable battery system

CNS 15424-1 (2015)

Approval Signatory: WU, Joy; HUNG, Hermes; HSIAO, Andy

22.05 Transportation Equipment

Stationary a.c. and d.c. conductive power supply systems for electric motorcycle

E001 Safety

CNS 16125 (2020)

CNS 16125 (2020) (Excluded EMC)

480 Vac max., 120 Vdc max.

CNS 16125 (2020) (Excluded Resistance to tracking, UV test)

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

CNS 16125 (2020) (Resistance to tracking, UV test)



(Testing location: No.555, Sec. 2, Wenhua 3rd Rd., Linkou Dist., New Taipei City 244, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; YANG, Andy; HSIAO, Andy; XIZO, Simon

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan, R.O.C.; 2.No. 555, Sec. 2, Wenhua 3rd Rd., Linkou Dist., New Taipei City 244, Taiwan (R.O.C.)

E002 EMC

CNS 16125 (2020)

Only EMC (Ch5.14)

Approval Signatory: LIN, Kevin; CHEN, Licher; HUANG, Jerry

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan, R.O.C.; 2.No. 34, Lin 5, Dingfu, Linkou Dist., New Taipei City 24442, Taiwan (R.O.C.)

22. 05 Transportation Equipment

Stationary a.c and d.c. conductive power supply systems for electric motorcycle--Battery swapping system

E001 Safety

CNS 16126 (2020)

480 Vac max., 120 Vdc max

CNS 16126 (2020) (Excluded Resistance to tracking, UV test)

(Testing location: No. 8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City, Taiwan)

CNS 16126 (2020) (Only Resistance to tracking, UV test)

(Testing location: No.555, Sec. 2, Wenhua 3rd Rd., Linkou Dist., New Taipei City 244, Taiwan)

Approval Signatory: WU, Joy; HUNG, Hermes; YANG, Andy; HSIAO, Andy; XIZO, Simon

Testing Site: 1.No.8, Lane 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan, R.O.C.; 2.No. 555, Sec. 2, Wenhua 3rd Rd., Linkou Dist., New Taipei City 244, Taiwan (R.O.C.)

(Null below)

