® TÜV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approval

Certificate

Standard

ISO 14064-1:2018

Certificate Registr. No. CF 50535865 0001

Report No.

70302391 001

Certificate Holder:

Avary Holding (Shenzhen) Co., Ltd.

Building A1-A3, Peng Ding Park, Songluo Road, Yanchuan Community, Yanluo

Street, Baoan District, Shenzhen City, Guangdong, P.R. China

Site:

Avary Holding (Shenzhen) Co., Ltd.

- Peng Ding Park, Songluo Road, Yan Chuan Community, Yanluo Street, Bao'anDistrict, Shenzhen City, Guangdong Province, China.

- Building No. 1 to 4, No. 1, Yanshan Avenue, Yanchuan Community, Yanluo Street, Shenzhen, Guangdong, China.

- Building 101SA05, Complex Building, No. 5, Niujiao Road, Yanchuan Community, Yanluo Street, Bao'an District, Shenzhen City, Guangdong

Province, China

Scope:

Verification and Validation Body: TÜV Rheinland (China) Ltd.

- Process: Document review, interview, site visit and recalculation Based on the information we have received and evaluated that:

- Programme: Voluntary GHG Scheme

- Review Criteria: ISO 14064-3:2006

- Organizational Boundary: Operational Control

Level of Assurance: Reasonable

Materiality: 5%

- Global warming potential (GWP): IPCC 2013

- Base year: 2021(2021.01.01-2021.12.31)

- Inventory year: 2021 (2021.01.01~2021.12.31)

- The total carbon emission is 215628.18 tonnes CO₂ equivalent (tCO₂e)

- Direct emission is 3390.90 tCO₂e

- Indirect emission is 212237.28 tCO2e

Imported energy: 209990.01 tCO₂e; Transportation: 1643.63 tCO₂e; Products used by organization: 603.64 tCO₂e (excluding purchased goods emission); Associated with the use of products from the organization: 0.00 tCO₂e; Other sources: 0.00 tCO₂e

- The inventory use 2012 Chinese national average electricity emissions factor of South China power grid for GHGs calculation.

Validity:

This certificate only reviewed the emissions data of inventory year, this certificate is not for the management systems certification.

2022-04-23

TÜV Rheinland (China) Ltd.

Room 301, 3F and Room 1203, 12F, Blatforing 4, No.15, Ronghua South Road, Beijing Economic-Technological Development Area, Beijing (Yizhuang group in high-end industrial area of Beijing Pilot Free Trade Zone), 100176, P. R. China

This verification and validation is based on the information made available to TÜV Rheinland and the engagement conditions detailed above. Therefore, TÜV Rheinland cannot guarantee the accuracy or correctness of this information. TÜV Rheinland cannot be held liable by any party relying or acting upon this verification and validation.



Standard

Certificate

ISO 14064-1:2018

Certificate Registr. No.

CF 50535869 0001

Report No.

70302393 001

Certificate Holder:

HongQiSheng Precision Electronics (Qinhuangdao) Co., Ltd. No. 18 Tengfei Road, Qinhuangdao Economic and Technological

Development Zone, Hebei, P.R. China

Site:

HongQiSheng Precision Electronics (Qinhuangdao) Co., Ltd. No. 18 Tengfei Road, Qinhuangdao Economic and Technological Development Zone, Hebei, P.R. China

Scope:

Verification and Validation Body: TÜV Rheinland (China) Ltd.
- Process: Document review, interview, site visit and recalculation
Based on the information we have received and evaluated that:

- Programme: Voluntary GHG Scheme
 Review Criteria: ISO 14064-3:2006
- Organizational Boundary: Operational Control
- Level of Assurance: Reasonable
- Materiality: 5%
- Global warming potential (GWP): IPCC 2013
- Base year: 2021 (2021.01.01~2021.12.31)
- Inventory year: 2021 (2021.01.01~2021.12.31)
- The total carbon emission is 359157.80 tonnes CO₂ equivalent(tCO₂e)
 - Direct emission is 25590.09 tCO2e
 - Indirect emission is 333567.71 tCO2e
 - Imported energy: 329679.71 tCO₂e; Transportation: 3458.46 tCO₂e; Products used by organization: 0.00 tCO₂e; Associated with the use of products from the organization: 429.54 tCO₂e; Other sources: 0.00 tCO₂e
 - The inventory uses North China Power Grid Emission Factor of "2012 Chinese Regional Average Grid Emission Factor" for calculation.

Validity:

This certificate only reviewed the emissions data of inventory year, this certificate is not for the management systems certification.

2022-04-15

TÜV Rheinland (China) Ltd.
Room 301, 3F and Room 1203, 12F, Building 4, No.15, Ronghua
South Road, Beijing Economic-Technological Development
Area, Beijing (Yizhuang group in high-end industrial area
of Beijing Pilot Free Trade Zone), 100176, P. R. China

This verification and validation is based on the information made available to TÜV Rheinland and the engagement conditions detailed above. Therefore, TÜV Rheinland cannot guarantee the accuracy or correctness of this information. TÜV Rheinland cannot be held liable by any party relying or acting upon this verification and validation.



Certificate

Standard

ISO 14064-1:2018

Certificate Registr. No. CF 50535873 0001

Report No.

70302398 001

Certificate Holder:

QiDing Technology Qinhuangdao, Co., Ltd.

No. 18-2, Tengfei Road, Qinhuangdao Economic and Technological

Development Zone, 06610 Hebei, P.R. China

Site:

QiDing Technology Qinhuangdao, Co., Ltd.

No. 18-2, Tengfei Road, Qinhuangdao Economic and Technological

Development Zone, 06610 Hebei, P.R. China

Scope:

Verification and Validation Body: TÜV Rheinland (China) Ltd.

- Process: Document review, interview, site visit and recalculation Based on the information we have received and evaluated that:

- Programme: Voluntary GHG Scheme - Review Criteria: ISO 14064-3:2006

- Organizational Boundary: Operational Control

- Level of Assurance: Reasonable

- Materiality: 5%

- Global warming potential (GWP): IPCC 2013

- Base year: 2021 (2021.01.01~2021.12.31)

- Inventory year: 2021 (2021.01.01~2021.12.31)

- The total carbon emission is 81740.88 tonnes CO₂ equivalent(tCO₂e)

Direct emission is 6187.27 tCO₂e

- Indirect emission is 75553.61 tCO2e

- Imported energy: **74961.47** tCO₂e; Transportation: **519.21** tCO₂e; Products used by organization: 0.00 tCO2e; Associated with the use of products from the organization: 72.93 tCO2e; Other sources: 0.00

tCO₂e

- The inventory uses North China Power Grid Emission Factor of "2012 Chinese Regional Average Grid Emission Factor" for calculation.

Validity:

This certificate only reviewed the emissions data of inventory year, this certificate is not for the management systems certification.

2022-04-15

TÜV Rheinland (China) Ltd. Room 301, 3F and Room 1203, 12F, Building 4, No.15, Ronghua South Road, Beijing Economic-Technological Development Area, Beijing (Yizhuang group in high-end industrial area of Beijing Pilot Free Trade Zone), 100176, P. R. China

This verification and validation is based on the information made available to TÜV Rheinland and the engagement conditions detailed above. Therefore, TÜV Rheinland cannot guarantee the accuracy or correctness of this information. TÜV Rheinland cannot be held liable by any party relying or acting upon this verification and validation.



® TÜV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approval

Certificate

Standard

ISO 14064-1:2018

Certificate Registr. No.

CF 50535866 0001

Report No.

70302392 0001

Certificate Holder:

HongHengSheng Electronical Technology (Huai'an) Co., Ltd. No.168, Fushikang Road, Economic and Technological Development Zone, Huai'an, Jiangsu, P.R. China

Site:

HongHengSheng Electronical Technology (Huai'an) Co., Ltd.

 Factory of HA01& HA02& ZA03& HA11& HA12& HA13& HA14& HA15, No.168, Fushikang Road, Huai'an Economic and Technological Development Zone, Jiangsu, P.R. China 223005 (Inside of Integrated Free Trade Zone)

- City View: (Bld2#room102, Bld 2#room202, Bld 2#room302, Bld3#room103, Bld 3#room503, Bld 3#room603) No.11, Suzhou Road, Huai'an Economy and Technology Zone, Huai'an City, Jiangsu, P. R. China

Scope:

Verification and Validation Body: TÜV Rheinland (China) Ltd.

- Process: Document review, interview, site visit and recalculation Based on the information we have received and evaluated that:

Programme: Voluntary GHG Scheme
Review Criteria: ISO 14064-3:2006

- Organizational Boundary: Operational Control

- Level of Assurance: Reasonable

- Materiality: 5%

- Global warming potential (GWP): IPCC 2013 - Base year: 2021 (2021.01.01~2021.12.31)

- Inventory year: 2021 (2021.01.01~2021.12.31)

- The total carbon emission is 149210.36 tonnes CO₂ equivalent (tCO₂e)

- Direct emission is 3598.88 tCO2e

- Indirect emission is 145611.48 tCO2e

Imported energy: 131498.16 tCO₂e; Transportation: 13814.20 tCO₂e; Products used by organization: 299.12 tCO₂e(Excluding GHG emissions from purchased goods); Associated with the use of products from the organization: 0.00 tCO₂e; Other sources: 0.00 tCO₂e

- The inventory use 2012 Chinese average electricity emission factors of East China power grid for GHGs calculation.

Validity:

This certificate only reviewed the emissions data of inventory year, this certificate is not for the management systems certification.

2022-04-23

TUV Pheinland (China) Ltd.
Room 301, 3F and Room 1203, 12F, Building 4, No.15, Ronghua
South Road, Beijing Economic-Technological Development
Area, Beijing (Yizhuang group in high-end industrial area
of Beijing Pilot Free Trade Zone), 100176, P. R. China

This verification and validation is based on the information made available to TÜV Rheinland and the engagement conditions detailed above. Therefore, TÜV Rheinland cannot guarantee the accuracy or correctness of this information. TÜV Rheinland cannot be held liable by any party relying or acting upon this verification and validation.



® TÜV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approval

Certificate

Standard

ISO 14064-1:2018

Certificate Registr. No. CF 50535870 0001

Report No.

70302395 0001

Certificate Holder:

QingDing Precision Electronics (Huai'an) Co., Ltd.

No. 8 Pengding Road, Huai'an Economic and Technological

Development Zone, Jiangsu, P.R. China

Site:

QingDing Precision Electronics (Huai'an) Co., Ltd.

Factory of B15, B05, B06, B16, B17, B03, B04, A14, B12 and B13,

No.8, Pengding Road, Huai'an Economic and Technological

Development Zone, Jiangsu Province, China

Scope:

Verification and Validation Body: TÜV Rheinland (China) Ltd.

- Process: Document review, interview, site visit and recalculation Based on the information we have received and evaluated that:

- Programme: Voluntary GHG Scheme

- Review Criteria: ISO 14064-3:2006

- Organizational Boundary: Operational Control

- Level of Assurance: Reasonable

- Materiality: 5%

- Global warming potential (GWP): IPCC 2013

- Base year: 2021 (2021.01.01~2021.12.31)

- Inventory year: 2021 (2021.01.01~2021.12.31)

- The total carbon emission is 172429.56 tonnes CO₂ equivalent (tCO2e)

Direct emission is 1707.86 tCO₂e

Indirect emission is 170721.71 tCO₂e

- Imported energy: 169544.57 tCO₂e(100% electricity was purchased from power grid with renewable energy); Transportation: 955.45 tCO₂e; Products used by organization: 221.68 tCO2e(Excluding GHG emissions from purchased goods); Associated with the use of products from the organization: 0.00 tCO₂e; Other sources: 0.00 tCO₂e

- The inventory use 2012 Chinese average electricity emission factors of East China power grid for GHGs calculation.

Validity:

This certificate only reviewed the emissions data of inventory year, this certificate is not for the management systems certification.

2022-04-23

TUV Rheinland (China) Ltd.

Room 301, 3F and Room 1203, 12F, Building 4, No.15, Ronghua South Road, Beijing Economic-Technological Development Area, Beijing (Yizhuang group in high-end industrial area of Beijing Pilot Free Trade Zone), 100176, P. R. China

This verification and validation is based on the information made available to TÜV Rheinland and the engagement conditions detailed above. Therefore, TÜV Rheinland cannot guarantee the accuracy or correctness of this information. TÜV Rheinland cannot be held liable by any party relying or acting upon this verification and validation.





® TÜV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approval.

Certificate

Standard

ISO 14064-1:2018

Certificate Registr. No. CF 50535872 0001

Report No.

70302397 0001

Certificate Holder:

YuDing Precision Electronics (Huai'an) Co., Ltd.

No. 18 Pengding Road, Huaian Economic and Technological

Development Zone, Jiangsu, P.R. China

Site:

YuDing Precision Electronics (Huai'an) Co., Ltd.

Factory of B01 and B02, No. 18 Pengding Road, Huaian Economic and

Technological Development Zone, Jiangsu, P.R. China

Scope:

Verification and Validation Body: TÜV Rheinland (China) Ltd.

- Process: Document review, interview, site visit and recalculation Based on the information we have received and evaluated that:

- Programme: Voluntary GHG Scheme

- Review Criteria: ISO 14064-3:2006

- Organizational Boundary: Operational Control

- Level of Assurance: Reasonable

- Materiality: 5%

- Global warming potential (GWP): IPCC 2013

- Base year: 2021 (2021.01.01~2021.12.31)

- Inventory year: 2021 (2021.01.01~2021.12.31)

- The total carbon emission is 73607.80 tonnes CO₂ equivalent (tCO2e)

- Direct emission is **265.11** tCO₂e

Indirect emission is 73342.69 tCO₂e

- Imported energy: 73327.84 tCO₂e(62% electricity was purchased from power grid with renewable energy); Transportation: 14.54 tCO₂e; Products used by organization: 0.31 tCO₂e(Excluding GHG emissions from purchased goods); Associated with the use of products from the organization: 0.00 tCO2e; Other sources: 0.00 tCO2e

- The inventory use 2012 Chinese national average electricity emissions factor of East China power grid for GHGs calculation.

Validity:

This certificate only reviewed the emissions data of inventory year, this certificate is not for the management systems certification

2022-04-23

TUV Rheinland (China) Ltd.

Room 301, 3F and Room 1203, 12F, Building 4, No.15, Ronghua South Road, Beijing Economic-Technological Development Area, Beijing (Yizhuang group in high-end industrial area of Beijing Pilot Free Trade Zone), 100176, P. R. China

This verification and validation is based on the information made available to TÜV Rheinland and the engagement conditions detailed above. Therefore, TÜV Rheinland cannot guarantee the accuracy or correctness of this information. TÜV Rheinland cannot be held liable by any party relying or acting upon this verification and validation.





溫室氣體查驗聲明書

2021 年溫室氣體排放資訊

先豐通訊股份有限公司

32853 桃園市觀音工業區經建一路 16、27 號

經本公司依據 ISO 14064-3:2006 完成查驗並符合下列標準要求

ISO 14064-1:2018

直接溫室氣體排放量 12,390.5316 公噸二氧化碳當量 間接溫室氣體排放量 58,809.8337 公噸二氧化碳當量 直接與間接溫室氣體排放量 71,200.365 公噸二氧化碳當量

簽署人

黄世忠

資深副總裁

日期: 2022年05月05日

版次:1

TGP56A-15-6 2103

台灣檢驗科技股份有限公司

新北市五股區(新北產業園區)五工路 136 之 1 號 t (02) 22993279 f (02)22999453 www.sgs.com



【全廠/集團各類別溫室氣體排放量】

單位:公噸二氧化碳當量

	報台	溫室氣體排放量	
類別		内容說明	/血
直接	於溫室氣體排放	彙整組織邊界內由組織擁有或 控制的溫室氣體。	12,390.5316
間	輸入能源溫室氣體排放	外購電力產生之排放	52,367.0336
接溫	運輸溫室氣體排放	包含空運及海運方式之進出口 運輸活動	6,442.8001
室氣	組織使用產品溫室氣體 排放	未揭露	
體排	使用來自於組織產品溫 室氣體排放	未揭露	
放	其他來源溫室氣體排放	未揭露	-
直接	E與間接溫室氣體總排放量	71,200.365	



台灣檢驗科技股份有限公司(以下簡稱SGS),經與先豐通訊股份有限公司(以下簡稱先豐通訊),32853 桃園市觀音工業區經建一路16、27號,達成雙邊協議,依據ISO 14064-3:2006之要求執行直接與間接溫室氣體排放量之查驗,溫室氣體排放量涵蓋期間自2021年01月01日至2021年12月31日,查驗聲明內容說明如下:

角色與責任

先豐通訊管理階層確保組織溫室氣體資訊系統之發展、紀錄維護及文件化程序已符合標準要求,負責評估、決定及報告溫室氣體排放量資訊,並提供支持溫室氣體主張所需之其他資訊給SGS。

SGS秉持第三方查驗單位之準則,依據2022年02月17日簽訂之雙邊協議、ISO 14064-1:2018、ISO 14064-3:2006要求,於2022年03月10日至2022年04月01日期間執行溫室氣體排放量查驗活動,並根據先豐通訊 適用範圍、目標、準則及溫室氣體排放量涵蓋期間自2021年01月01日至2021年12月31日之查驗結果,提出溫室氣體查驗聲明。

保證等級

SGS依據查驗準則及雙邊協議執行查驗程序,針對先豐通訊於溫室氣體主張所提類別一及類別二之查驗證據顯示,未違反實質性差異門檻,符合主管機關認可之合理保證等級。

查驗範圍

SGS依據與先豐通訊之雙邊協議,確認先豐通訊組織邊界及報告範圍內之人為活動溫室氣體排放量與相關標準要求之符合性,根據ISO 14064-3:2006準則提出上述保證聲明涵蓋內容如下:

- 杳驗先豐誦訊之 2021 年溫室氣體排放量
- 包含廠區:

廠區	活動範圍地理位置
一廠 32853 桃園市觀音工業區經建一路 16 號	
二廠	32853 桃園市觀音工業區經建一路 27 號

- 溫室氣體排放源資訊來源為先豐通訊之盤查資訊
- 排放溫室氣體種類:二氧化碳(CO₂)、甲烷(CH₄)、氧化亞氮(N₂O)、氫氟碳化物(HFCs)、全氟碳化物(PFCs)、六氟化硫(SF₆)、三氟化氮(NF₃)
- 全球暖化潛勢(GWP)引用 IPCC 2007 第四次評估報告之全球暖化潛勢值
- 排放係數資料庫來源:
 - o 直接溫室氣體排放: 行政院環保署溫室氣體排放係數管理表 6.0.4

- o 間接溫室氣體排放:
 - 輸入能源之電力引用經濟部能源局 2021 年公布之 2020 年電力排放係數: 0.502 公斤二 氧化碳當量/度計算
 - 二級資料庫引用產品碳足跡資訊網.
- 溫室氣體排放量資訊涵蓋週期: 2021 年 01 月 01 日至 2021 年 12 月 31 日

盤查清冊版本次: 2022.04.13, V5盤查報告書版本次: 2022.04.13, V3查驗聲明之預期使用者: 組織自行使用

查驗目標

SGS獨立客觀的取得支持溫室氣體主張揭露資訊的佐證,確保報告資訊符合準確性、完整性、一致性 及透明度之準則,其內容包含錯誤或遺漏之項目。

杳驗準則

遵守下列相關標準要求執行溫室氣體主張之查驗:

● ISO 14064-1:2018 溫室氣體-第 1 部:組織層級溫室氣體排放與移除之量化及報告附指引之 規範

實質性

先豐通訊定義溫室氣體主張符合性之實質性差異門檻判斷準則為5%,SGS依據此準則確認溫室氣體揭露資訊之遺漏或錯誤程度。

結論

先豐通訊依據查驗準則要求提出溫室氣體主張,揭露資訊涵蓋期間自2021年01月01日至2021年12月31日,期間溫室氣體排放量為71,200.365公噸二氧化碳當量及生質燃燒之二氧化碳排放量為0.0000公噸二氧化碳當量。SGS採用風險評估方法為基礎,確保並控管溫室氣體排放資訊揭露風險;規劃及執行查驗流程,包含行前評估、取樣計畫、證據之蒐集,取得查驗聲明需要之資訊、說明及相關佐證,確保揭露之溫室氣體排放量準確性。

【全廠/集團各類別溫室氣體排放量】

L ,		十四·公·以一手(10)次田主	
報告邊界 類別 内容說明			溫室氣體排放量
直接		彙整組織邊界內由組織擁有或 控制的溫室氣體。	12,390.5316
間接	輸入能源溫室氣體排放	外購電力產生之排放	52,367.0336
溫室	運輸溫室氣體排放	包含空運及海運方式之進出口 運輸活動	6,442.8001

單位: 公輔二氧化碳當量

氣體	組織使用產品溫室氣體 排放	未揭露	
排放	使用來自於組織產品溫 室氣體排放	未揭露	
	其他來源溫室氣體排放	未揭露	
直接與間接溫室氣體總排放量			71,200.365

SGS以客觀公正之立場,評估先豐通訊溫室氣體資訊系統、監督方法及報告程序,溫室氣體排放量涵蓋期間自2021年01月01日至2021年12月31日,依據查驗結果保證其適用範圍、目標及準則之一致性及適切性,針對類別一及類別二提出合理保證之查驗聲明,無保留意見之列舉。

SGS根據自身角色及責任,在此聲明溫室氣體主張具實質性、正確性,以及公平性地陳述溫室氣體數據及資訊,並依據ISO 14064-1:2018製備執行溫室氣體量化、監督及報告溫室氣體資訊,本查驗聲明將視為說明先豐通訊溫室氣體主張之查驗結果。

保密性聲明

此報告及附件可能包含屬於先豐通訊之機密資訊,未經先豐通訊書面同意,其他個人、團體或公司禁 止自行複製或發行。

利益衝突迴避聲明

此報告及附件內容完全依照主管機關之標準方法與程序等相關規定,秉持公正、誠實進行查驗作業。絕無虛偽不實,如有違反,就政府機構所受損失願負連帶賠償責任之外,並接受主管機關依法令所為之行政處分及刑事處罰。

所有查證人員瞭解如自身受政府機關委任從事公務,亦屬於刑法上之公務員,並瞭解刑法上圖利罰、 公務員登載不實偽造公文書及貪污治罪條例之相關規定,如有違反,亦為刑法及貪污治罪條例之適用 對象,願受最嚴厲之法律制裁。

本公司與受查驗單位並無財務投資之關係,且符合主管機關對利益衝突迴避之要求。如有違反前述事實情事,經主管機關查證屬實時,此報告及附件內容願接受主管機關判定為無效之處分。

查證團隊

上述聲明係查證團隊依據公正之查驗過程,針對先豐通訊之 2021 年溫室氣體排放量所提出之聲明。

主導查驗員: 彭立德

查驗員: 王巍

子類 静雄 黄杏文 多本菜

備註:本查驗聲明遵照 SGS 溫室氣體查驗服務條款要求 http://www.sgs.com/terms_and_conditions.htm,聲明書內容由台灣檢驗科技股份有限公司依據溫室氣體主張之查驗結果進行編製,業經客戶同意後發行。本聲明書非用以解除客戶遵守組織章程、全國或者地方法令,以及任何被發佈國際指南章程之責任;客戶與 SGS 彼此為獨立之個體,客戶非受 SGS 約束,在此 SGS 除客戶之外毋須代表其面對其他組織團體。