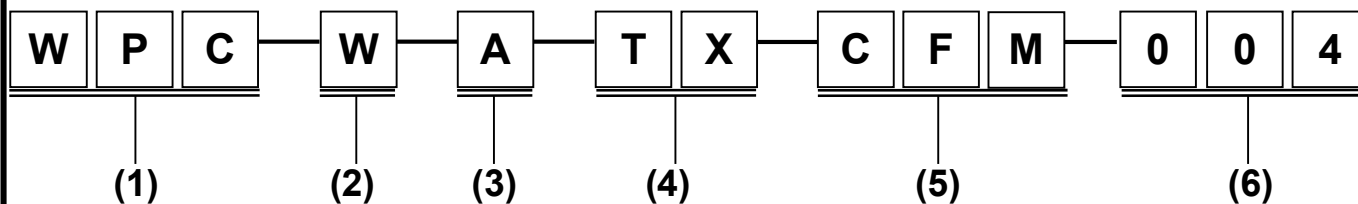


WPC-W-A-TX-CFM-004 Specification

1. Features and application :

- (1) Magnet alignment.
- (2) Support Qi 2.X (MPP+BPP).
- (3) Protections: UVP 、 OVP 、 OTP 、 FOD.

2. Explanation of Part Number :



- (1) Product type : Wireless Power Charging
- (2) Mode : WPC
- (3) Active or passive : Active
- (4) Type : Power Transmitter
- (5) Antenna material or type : Coil + Ferrite + Magnet
- (6) Suffix : Serial number

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=± X.X=± X.XX=±

ANGLES=± HOLEDIA=±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY:周敬晨

CHECKED BY:鄭榮謀

DESIGNED BY:曾國恒

APPROVED BY:洪碩國

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : WPC-W-A-TX-CFM-004 Specification

DOCUMENT
NO.

ENS

SPEC REV.
P0

3. Dimension:

8 7 6 5 4 3 2 1

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF INPAQ AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY INPAQ

Reversion	Engineering Change Description	Date	Owner
P0	NEW	2025/02/21	Tony

Technical drawing of a circular electronic component. The drawing includes three views: a top view showing internal components and a circular outline with a diameter of $\phi 54.00 \pm 0.20$; a side view showing the component's profile with a total height of 5.85 ± 0.30 and a Mylar thickness of 0.95 ± 0.30 ; and a front view showing the component's face. The drawing is labeled with dimensions and tolerances.

INDEX	DESCRIPTION	PART NO.	QTY	MATERIAL
PARTS LIST				

SELECT	SPEC. CLASS	A	B	C	D
	< 8mm	0.05	0.1	0.1	0.2
	8-25mm	0.05	0.15	0.15	0.3
	25-50mm	0.12	0.2	0.2	0.4
	50-250mm	0.25	0.3	0.4	0.5
	ANGLE	0.5			

CAD GENERATED DRAWING DO NOT MANUALLY UPDATE	
DRAWN	Kevin
DESIGNED	Tony
APPROVED	Even

SIZE A4	
PART No.: XXXXXXXXXX0000	DWG No.: MTSXXXXXXX0000
UNIT: MM	SCALE: 1:1

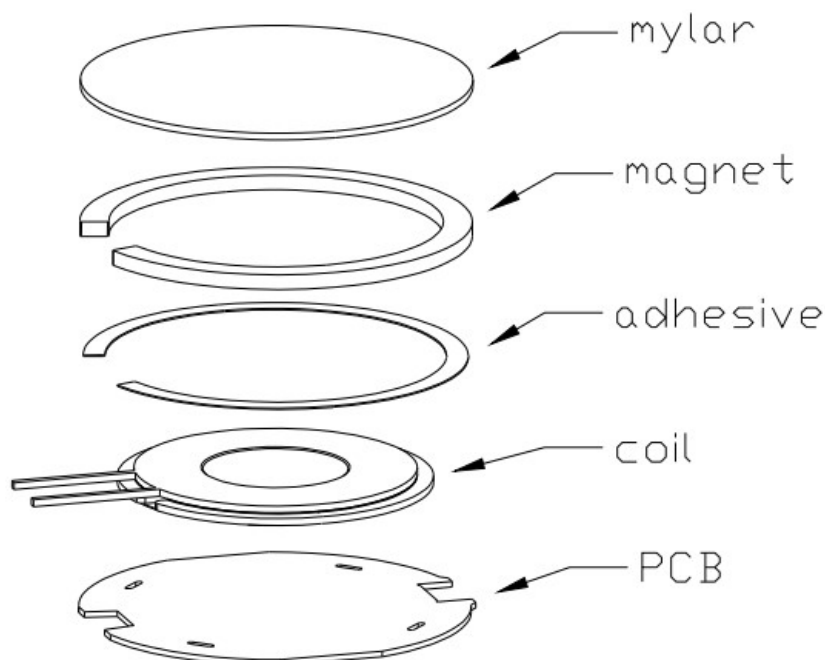
佳邦科技股份有限公司
INPAQ Technology Co., Ltd.

WPC-W-A-TX-CFM-004

3RD ANGLE

1 OF 1

4. Solid picture and Material list:



UNLESS OTHER SPECIFIED TOLERANCES ON :

$$\mathbf{X}=\pm \quad \mathbf{X.X}=\pm \quad \mathbf{X.XX}=\pm$$

ANGLES=± HOLEDIA=±

SCALE : N/A

UNIT : mm



INPAQ TECHNOLOGY CO., LTD.

DRAWN BY:周敬晨

CHECKED BY:鄭榮謀

DESIGNED BY:曾國恒

APPROVED BY:洪碩國

TITLE : WPC-W-A-TX-CFM-004 Specification

DOCUMENT
NO.

ENS

SPEC REV.
P0

5. Electrical specification:

Items	Specification
Input voltage	5V $\pm$ 5% (Support BPP、Apple fast charging) 9V $\pm$ 5% (Support MPP、Apple fast charging)
Rated input current	5V@3A / 9V@2.22A
Input protocol	DC / QC / PD3.1
Standby power	< 0.35W
Output protocol	Qi-BPP5W / Qi-MPP15W / 7.5W Apple fast charging
Maximum output power	5W(5V/1A) / 15W(14V/1.07A) / 7.5W(7.5V/1A)
Efficiency	81% Typ (Test with CPS4041 MPP RX EVK)
Effective charging height(Z)	Max 2mm with magnetic phone.@15W (Coil to Coil=3.86mm---Typ.) Max 4mm with magnetic phone.@5W (Coil to Coil=5.86mm---Typ.)
Protections	UVP / OVP / OTP / FOD
OTP Threshold	Trigger: 70°C/Recover: 50°C (NTC surface temperature)
Operating Ambient Temperature	0 to +35° C
Storage Temperature	-20 to +70° C

6. Power allocation:

PSU type	Output protocol and power
DC 5V (2.1A <= lin)	BPP5W / AFC7.5W
DC 9V (2.22A <= lin)	BPP5W / AFC7.5W / MPP15W
PD / QC 5V (1.5A <= lin <= 2.1A)	BPP5W
PD / QC 5V (2.1A <= lin <= 3A)	BPP5W / AFC7.5W
PD / QC 9V (1.2A <= lin <= 2A)	BPP5W / AFC7.5W
PD / QC 9V (2A <= lin <= 2.22A)	BPP5W / AFC7.5W / MPP12W
PD / QC 9V (2.22A <= lin)	BPP5W / AFC7.5W / MPP15W

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±

X.X=±

X.XX=±

ANGLES=±

HOLEDIA=±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY:周敬晨

CHECKED BY:鄭榮謀

DESIGNED BY:曾國恒

APPROVED BY:洪碩國

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : WPC-W-A-TX-CFM-004 Specification

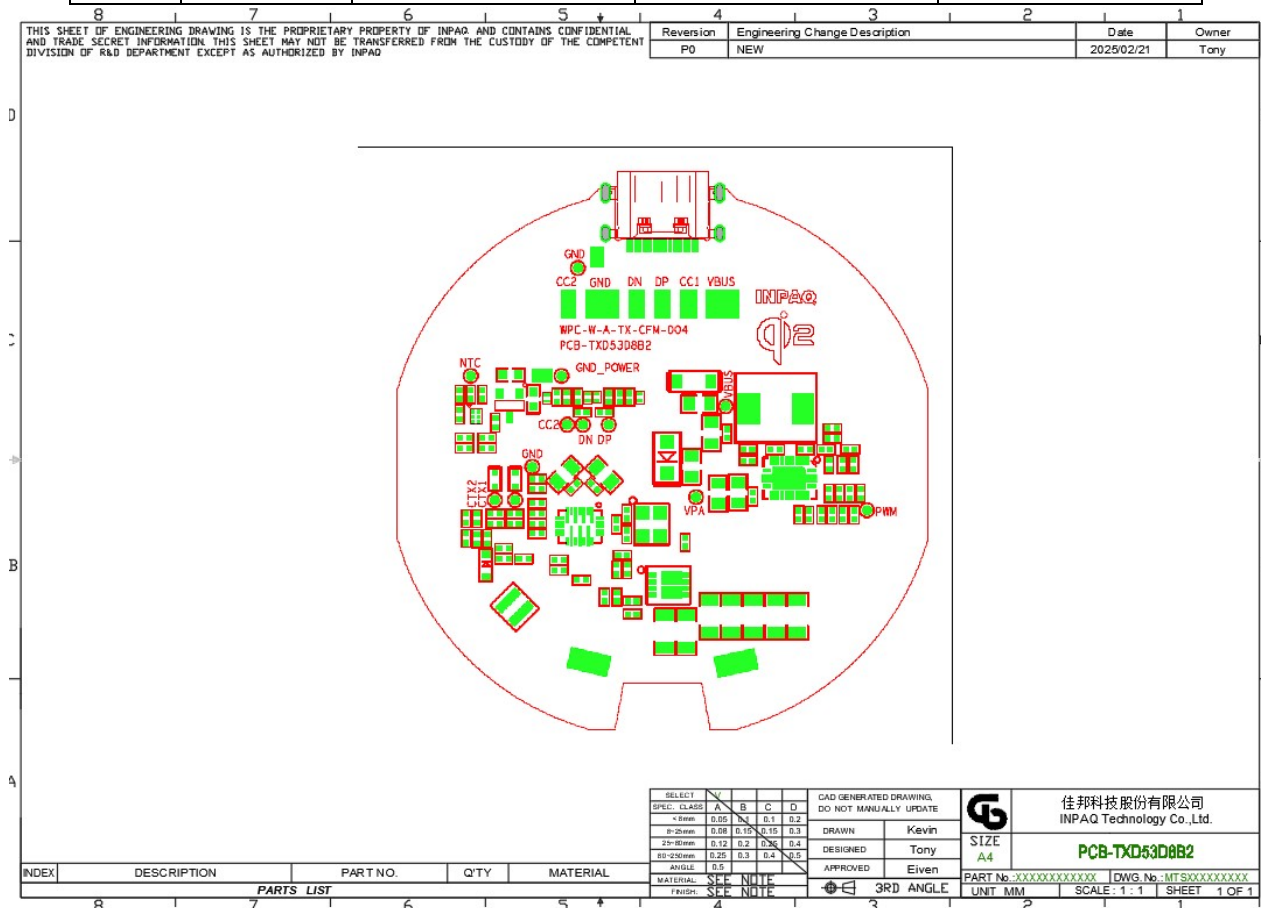
DOCUMENT
NO.

ENS

SPEC REV.
P0

7. PCBA Specification:

PIN	Item	USBC Cable Connection	USBA Cable Connection	DC Connection
1	CC2	USB CC2	NC	NC
2	GND	GND	GND	GND
3	DN	USB D-	USB D-	NC
4	DP	USB D+	USB D+	NC
5	CC1	USB CC1	NC	NC
6	VBUS	VBUS	VBUS	VBUS



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=± X.X=± X.XX=±

ANGLES=± HOLEDIA=±

SCALE : N/A

UNIT : mm

DRAWN BY:周敬晨

CHECKED BY:鄭榮謀

DESIGNED BY:曾國恒

APPROVED BY:洪碩國

TITLE : WPC-W-A-TX-CFM-004 Specification

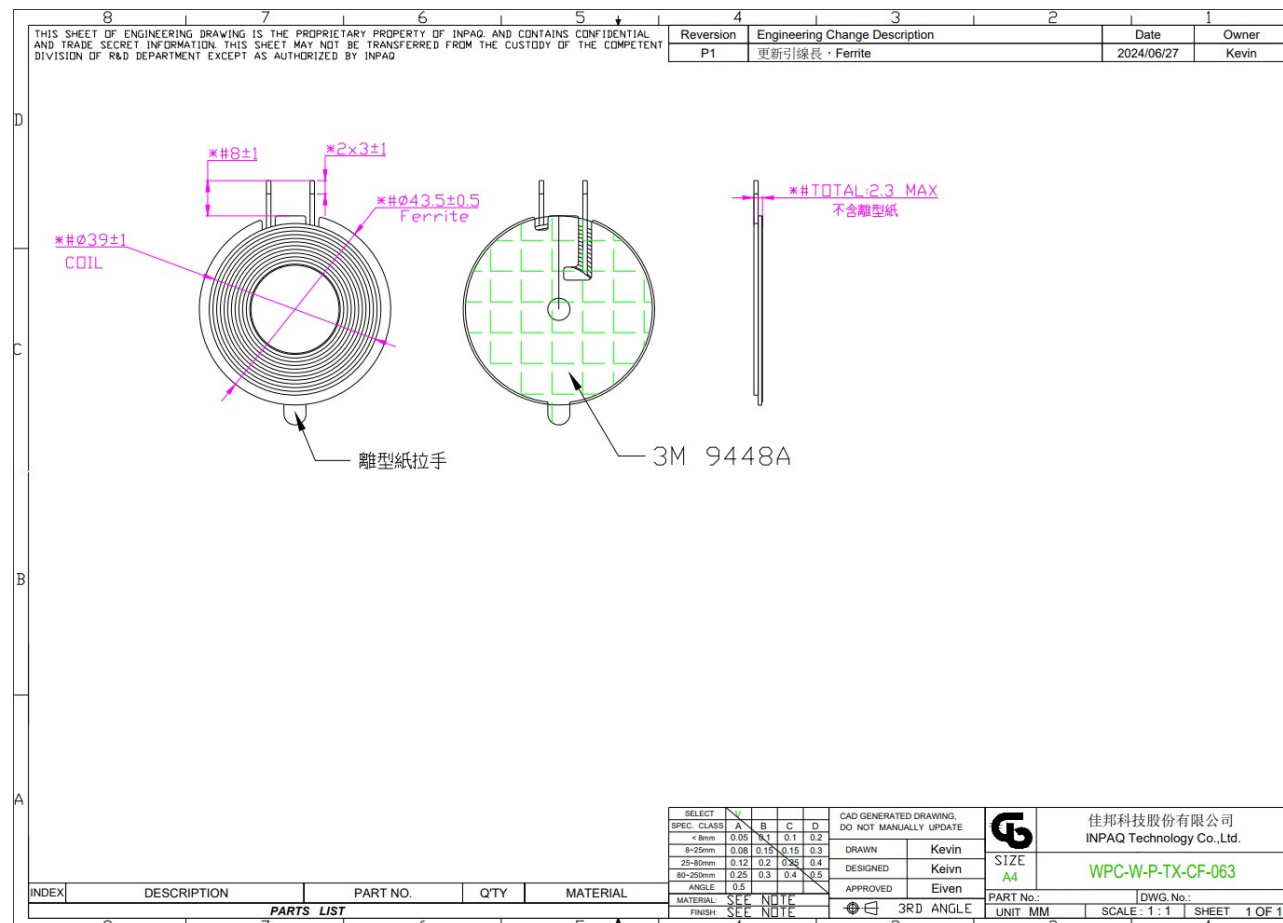
DOCUMENT
NO.

ENS

SPEC REV.
P0

8. Coil Specification:

Coil		
Test Item	Test Condition	Specification
Inductance	360K Hz, 1V	7.9 uH±10%
RS	360K Hz, 1V	100 mΩ Max
DCR	1Hz@25°C	70 mΩ Max



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±

X.X=±

X.XX=±

ANGLES=±

HOLEDIA=±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY:周敬晨

CHECKED BY:鄭榮謀

DESIGNED BY:曾國恒

APPROVED BY:洪碩國

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : WPC-W-A-TX-CFM-004 Specification

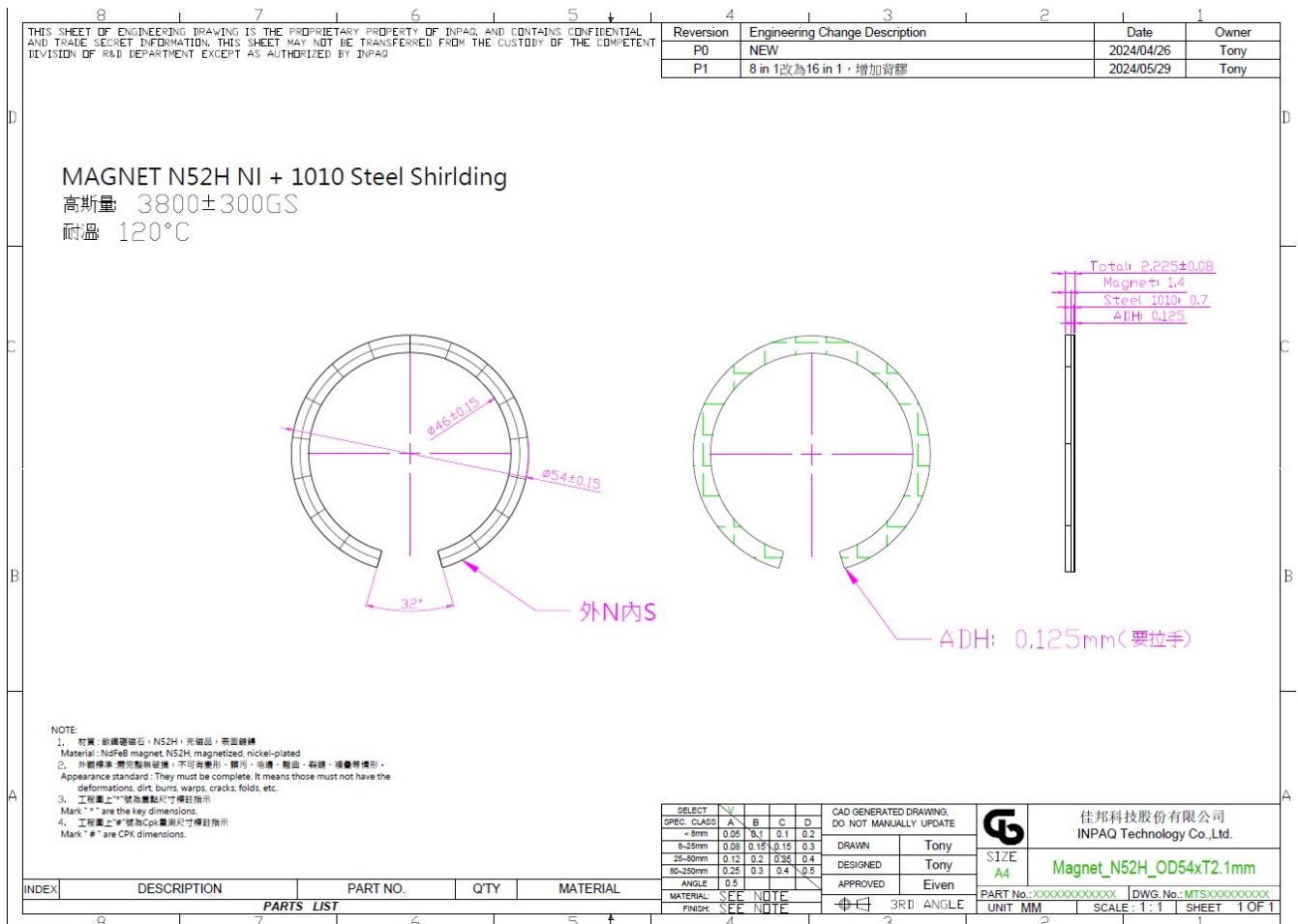
DOCUMENT
NO.

ENS

SPEC REV.
P0

9.Magnet Specification:

Component	Material parameter	Typical values	unit
		N52H	
Magnet array	Br	1.42-1.46	T
	Hcb	$\geq 1.0511 \times 10^6$	A/m
	Hcj	$\geq 1.274 \times 10^6$	A/m
	Bhmax	$3.9-4.22 \times 10^5$	T。 A/m
	Gaussian	3800 ± 300	Gs



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±

X.X=±

X.XX=±

ANGLES=±

HOLEDIA=±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY:周敬晨

CHECKED BY:鄭榮謀

DESIGNED BY:曾國恒

APPROVED BY:洪碩國

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : WPC-W-A-TX-CFM-004 Specification

DOCUMENT
NO.

ENS

SPEC REV.
P0

10. Reliability Test:

NO	ITEM	Condition	Characteristics	Remark
1	High Temp. Storage Test	Initial value measured at standard test condition. Test Conditions: 85 $\pm$ 5 $^{\circ}$ C, 48hr Measuring After 1-2hr at standard conditions.	- No electrical, appearance problem	
2	Low Temp. Storage Test	Initial value measured at standard test condition. Test Conditions: -40 $\pm$ 5 $^{\circ}$ C, 48hr Measuring After 1-2hr at standard conditions.		
3	Temperature cycle Test	Initial value measured at standard test condition. Test Conditions: -40 $^{\circ}$ C, 0.5hr $\rightarrow$ 85 $^{\circ}$ C, 0.5hr Test Cycle: 50 times Measuring After 1-2hr at standard conditions.		
4	High Temp & Humidity Storage Test	Initial value measured at standard test condition. Test Conditions: 85 $\pm$ 5 $^{\circ}$ C, 85 $\pm$ 5% RH, 48hr Measuring After 1-2hr at standard conditions.		

11. Packing Information:

- 1.) Do not apply high mechanical force or damage on the products during attaching process.
- 2.) Do not store in high temperature or high humidity environments.
- 3.) Avoid heat shock, vibration, direct sunlight, etc.
- 4.) Do not store in corrosive gas atmosphere such as one containing sulfurous acid gas or alkaline gas.

12. Operating & Storage Condition:

- 1.) OPERATING AMBIENT TEMPERATURE RANGE: 0 $^{\circ}$ C $\sim$ +35 $^{\circ}$ C
- 2.) STORAGE AMBIENT TEMPERATURE RANGE: -20 $^{\circ}$ C $\sim$ +70 $^{\circ}$ C

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±

X.X=±

X.XX=±

ANGLES=±

HOLEDIA=±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY:周敬晨

CHECKED BY:鄭榮謀

DESIGNED BY:曾國恒

APPROVED BY:洪碩國

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : WPC-W-A-TX-CFM-004 Specification

DOCUMENT
NO.

ENS

SPEC REV.

P0