



## FCC 47 CFR PART 15 SUBPART B

Applicant	:	ICP DAS CO., LTD.
Address	:	No. 111, Guangfu N. Rd., Hukou Township, Hsinchu County 30351, Taiwan, R.O.C.
Product Type	:	ICP DAS IO System
Trade Name	:	ICP DAS
Model Number	:	PM-4324 System
Test Specification	:	FCC 47 CFR PART 15 SUBPART B: Oct., 2014 ANSI C63.4: 2014 CISPR 22: 2008
Receive Date	:	Aug. 28, 2015
Test Period	:	Sep. 09 ~ 10, 2015
Issue Date	:	Oct. 08, 2015

Issue by

A Test Lab Techno Corp. No. 140-1, Changan Street, Bade City, Taoyuan County 334, Taiwan R.O.C. Tel: +886-3-2710188 / Fax: +886-3-2710190



Taiwan Accreditation Foundation accreditation number: 1330

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# Verification of Compliance

Issued Date: 2015/10/08

Applicant	:	ICP DAS CO., LTD.
Address	:	No. 111, Guangfu N. Rd., Hukou Township, Hsinchu County 30351, Taiwan, R.O.C.
Product Type	:	ICP DAS IO System
Trade Name	:	ICP DAS
Model Number	:	PM-4324 System
EUT Rated Voltage	:	AC 100-250V, 50-60Hz, 2.0A
Test Voltage	:	120 Vac / 60 Hz
Applicable	:	FCC 47 CFR PART 15 SUBPART B: Oct., 2014
Standard		ANSI C63.4: 2014
		CISPR 22: 2008
Test Result	:	Complied
Performing Lab.	:	A Test Lab Techno Corp. No. 140-1, Changan Street, Bade City,
		Taoyuan County 334, Taiwan R.O.C.
		Taiwan Accreditation Foundation accreditation number: 1330
		http://www.atl-lab.com.tw/e-index.htm

The above equipment has been tested by A Test Lab Techno Corp., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved By : Misty Wu Reviewed By : Frank Lin

(Manager)

(Misty Wu) (Testing Engineer)

(Frank Lin)



#### **General Information** 1

#### 1.1 **Summary of Test Result**

Emission					
Standard	Item	Result	Remark		
FCC 47 CFR PART 15 SUBPART B ANSI C63.4	Conducted Emission	PASS	Meet Class A limit		
FCC 47 CFR PART 15 SUBPART B ANSI C63.4	Radiated Emission	PASS	Meet Class A limit		

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

#### 1.2 **Measurement Uncertainty**

	Test Item	Frequency Range	Uncertainty (dB)
Conducted Emission	AC Power Port	9kHz ~ 30MHz	2.8

Test Item	Test Site	Frequency	Range	Uncertainty (dB)		
	TE06	30MHz ~ 1000MHz	Horizontal	5.2		
	TEUO		Vertical	5.5		
		1000MHz ~ 6	000MHz	4.7		
	TE01	6000MHz ~ 18	3000MHz	5.1		
Dedicted Emission	TEOT	18000MHz ~ 2	5.6			
Radiated Emission		26500MHz ~ 4	5.1			
		1000MHz ~ 6	000MHz	4.3		
	TE09	6000MHz ~ 18000MHz		4.6		
	TE09	18000MHz ~ 26500MHz		5.6		
		26500MHz ~ 40000MHz		5.1		
Note: The Vertical and Horizontal measurement uncertainty of 1GHz to 6GHz is evaluated and choose which polarity is worst value.						



### Feature of Equipment under Test :

The model listed below is series model to PM-4324 System.

Main	Software	Diversity	Mode 1
Main	Software	Diversity	Mode 1
USB-2026		5-channel Analog Input,2-channel Analog Output, 2-channel Digital Input and 2-channel Digital Output Module	V
SV-4201-CE7		10.4" SmartView with AM3354 CPU and WinCE7 OS	V
IWS-4201-CE7		InduSoft based PAC with 10.4" LCD (WinCE7 OS)	
VP-4201-CE7		10.4" ViewPAC with AM3354 CPU and CE7 OS	
VP-4208-CE7		10.4" Win-GRAF ViewPAC	
PMD-4201		Power Meter Concentrator with 10.4" LCD	
TPD-280-H		2.8" touch HMI device with RS-485	
TPD-280U-H		2.8" Touch HMI device with RS-485, USB download, RTC	
TPD-283-H		2.8" touch HMI device with Ethernet	
TPD-283U-H		2.8" touch HMI device with RS-485, USB, RTC, Ethernet	V
GW-7243D		DeviceNet Slave / Modbus Master Gateway	V
GW-7243D-X		DeviceNet Slave / Modbus Master Gateway (X : The Cover is mean any color)	
GW-7433D		Modbus TCP server & Modbus RTU slave to CANopen master Gateway	V
GW-7433D-X		Modbus TCP server & Modbus RTU slave to CANopen master Gateway (X : The Cover is mean any color)	
GW-7434D		Modbus/TCP server to DeviceNet master Gateway	V
GW-7434D-X		Modbus/TCP server to DeviceNet master Gateway (X : The Cover is mean any color)	
uPAC-7186EXD-CAN		Programmable Automation controller with two series communication port (RS-232/RS-485), one CAN port, one Ethernet port, 7-segment Display, 4 programable LEDs, 512 KB flash ,512 KB SRAM, developing tool kit, Minios7.	V
uPAC-7186EXD-CAN-X		Programmable Automation controller with two series communication port (RS-232/RS-485), one CAN port, one Ethernet port, 7-segment Display, 4 programable LEDs, 512 KB flash ,512 KB SRAM, developing tool kit, Minios7 (X : The Cover is mean any color)	
I-7188EF-016		FRnet uPAC	
I-7188EFD-016		FRnet uPAC with LED display	V
X511		3-Port RS-485	V
X607		128KB BBSRAM	V
I-8KE4		I-8KE4 Embedded I/O unit	
I-8KE4-X		I-8KE4 Embedded I/O unit (X : The Cover is mean any color)	
I-8KE4-MTCP		4-slots Ethernet I/O unit	
I-8KE4-MTCP-X		4-slots Ethernet I/O unit (X:The Cover is mean any color)	
I-8KE8		I-8KE8 Embedded I/O unit	V

Main	Software	Diversity	Mode 1
I-8KE8-X		I-8KE8 Embedded I/O unit (X:The Cover is mean any color)	
I-8KE8-MTCP		8-slots Ethernet I/O unit	
I-8KE8-MTCP-X		8-slots Ethernet I/O unit (X:The Cover is mean any color)	
USB-87P1		1 slot I/O Expansion Unit	
USB-87P2		2 slot I/O Expansion Unit	
USB-87P4		4 slot I/O Expansion Unit	V
USB-87P8		8 slot I/O Expansion Unit	
XP-8041-CE6		0 I/O slot WinCE 6.0 Based Standard XPAC (OS: Multi-Language version)	
XP-8341-CE6		3 I/O slot WinCE 6.0 Based Standard XPAC (OS: Multi-Language version)	V
XP-8741-CE6		7 I/O slot WinCE 6.0 Based Standard XPAC (OS: Multi-Language version)	
XP-8046-CE6		0 I/O slot WinCE 6.0 Based Indusoft + ISaGRAF XPAC (OS: Multi-Language version)	
XP-8346-CE6		3 I/O slot WinCE 6.0 Based Indusoft + ISaGRAF XPAC (OS: Multi-Language version)	
XP-8746-CE6		7 I/O slot WinCE 6.0 Based Indusoft + ISaGRAF XPAC (OS: Multi-Language version)	
XP-8047-CE6		0 I/O slot WinCE 6.0 Based ISaGRAF XPAC (OS: Multi-Language version)	
XP-8347-CE6		3 I/O slot WinCE 6.0 Based ISaGRAF XPAC (OS: Multi-Language version)	
XP-8747-CE6		7 I/O slot WinCE 6.0 Based ISaGRAF XPAC (OS: Multi-Language version)	
XP-8048-CE6		0 I/O slot WinCE 6.0 Based Win-GRAF XPAC (OS: Multi-Language version)	
XP-8348-CE6		3 I/O slots WinCE 6.0 Based Win-GRAF XPAC (OS: Multi-Language version)	
XP-8748-CE6		7 I/O slots WinCE 6.0 Based Win-GRAF XPAC (OS: Multi-Language version)	
XP-8049-CE6		0 I/O slot WinCE 6.0 Based InduSoft XPAC (OS: Multi-Language version)	
XP-8349-CE6		3 I/O slots WinCE 6.0 Based InduSoft XPAC (OS: Multi-Language version)	
XP-8749-CE6		7 I/O slots WinCE 6.0 Based InduSoft XPAC (OS: Multi-Language version)	
I-8041PW		32-channel Isolated Self Protected Digital Output Module	V
I-8041PW-X		32-channel Isolated Self Protected Digital Output Module (X : The Cover is mean any color)	
I-8041W		32-channel Isolated Self Protected Digital Output Module	
I-8041W-X		32-channel Isolated Self Protected Digital Output Module (X : The Cover is mean any color)	
DN-8K32R		32-channel relay output board Include : CA-3705A (37 Pin Male-Female D-sub cable 0.5M)	V
I-8172W		2-port FRnet module	V
I-8172W-X		2-port FRnet module (X:The Cover is mean any color)	

Main	Software	Diversity	Mode 1
I-87017W		8-channel Analog Input Module	V
I-87017W-X		8-channel Analog Input Module (X:The Cover is mean any color)	
I-87017RW		8-channel Analog Input Module with High Overvoltage Protection	
I-87017RW-X		8-channel Analog Input Module with High Overvoltage Protection (X:The Cover is mean any color)	
I-87017W-RMS		8-channel True RMS Input Module	V
I-87017W-RMS-X		8-channel True RMS Input Module (X:The Cover is mean any color)	
I-87H17W		8-channel HART Current Input Module	V
I-87H17W-X		8-channel HART Current Input Module (X : The Cover is mean any color)	
I-8124		1 Port DeviceNet Master Module with dual port RAM	
I-8124-X		1 Port DeviceNet Master Module with dual port RAM (X : The Cover is mean any color)	
I-8124W		1 Port DeviceNet Master Module with dual port RAM	V
I-8124W-X		1 Port DeviceNet Master Module with dual port RAM (X : The Cover is mean any color)	
I-8014W		16-bit 250K sampling rate 8/16-channel analog input module	V
I-8014W-X		16-bit 250K sampling rate 8/16-channel analog input module (X : The Cover is mean any color)	
I-8017DW		8-channel Analog Input Modul	V
I-8017DW-X		8-channel Analog Input Module (X:The Cover is mean any color)	
I-8017HCW		8-channel Analog Input Module	V
I-8017HCW-X		8-channel Analog Input Module (X:The Cover is mean any color)	
I-87015W		7-channel RTD Input Module	V
I-87015W-X		7-channel RTD Input Module (X:The Cover is mean any color)	
I-87015PW		7-channel RTD Input Module with 3-wire Lead Resistance Elimination	V
I-87015PW-X		7-channel RTD Input Module with 3-wire Lead Resistance Elimination (X : The Cover is mean any color)	
I-8064		8-channel Power Relay Output Module	
I-8064-X		8-channel Power Relay Output Module (X:The Cover is mean any color)	
I-8064W		8-channel Power Relay Output Module	V
I-8064W-X		8-channel Power Relay Output Module (X:The Cover is mean any color)	
PIR-130-AC		PIR Motion Sensor and Temperature Sensor Module	
PIR-130-DC		PIR Motion Sensor and Temperature Sensor Module	V
I-7565-CPM		USB to CANopen Master Converter	V

Main	Software	Diversity	Mode 1
I-7565-CPM-X		USB to CANopen Master Converter (X : The Cover is mean any color)	
I-7565-DNM		USB/DeviceNet Master communication Converter with D-sub 9-pin connector	V
I-7565-DNM-X		USB/DeviceNet Master communication Converter with D-sub 9-pin connector. (X : The Cover is mean any color)	
NS-208G		Unmanaged 8-port 10/100/1000 Base-T Ethernet Switch with Power Input +10 VDC ~ +30 VDC	
NSM-208G		Unmanaged 8-port 10/100/1000 Base-T Ethernet Switch with Power Input +10 VDC ~ +30 VDC, metal casing	V
DN-8468G		DN-8468GB is for general purpose usage	V
DN-8468GB		DN-8468GB is for general purpose usage	
DN-8468UB		Photo-isolated Universal Snap-on Wiring Terminal Board	
DN-8468MB		DN-8468MB is for Mitsubishi servo J2 Amplifier	
DN-8468PB		DN-8468PB is for Panasonic servo minas A Amplifier	
DN-8468FB		DN-8468FB is for FUJI FALDIC-W servo Amplifier	
DN-8468DB		DN-8468YB is for Delta ASDA A servo Amplifier	
DN-8468		Photo-isolated terminal board for ICPDAS four-axis stepper/servo controller	
DN-8468YB		DN-8468YB is for Yaskawa servo Amplifier	
I-7550E		PROFIBUS/Ethernet Converter	V
GST-63-M		Seismic Switch with Metal casing	V
PALERT		Seismic Switch with Metal casing	V
NS-205G		Unmanaged 5-port Industrial 10/100/1000 Base-T Ethernet Switch	V
PM-4324P		Modbus RTU, Multi-Channel Power Meter (Compatible with CTs from 50 to 1200A/333mV output)	
PM-4324-100P		Modbus RTU, Multi-Channel Power Meter (60 A)	V
PM-4324-160P		Modbus RTU, Multi-Channel Power Meter (100 A)	
PM-4324-240P		Modbus RTU, Multi-Channel Power Meter (200 A)	
PM-4324-360P		Modbus RTU, Multi-Channel Power Meter (300 A)	
PM-4324-400P		Modbus RTU, Multi-Channel Power Meter (400 A)	
PM-4324-600P		Modbus RTU, Multi-Channel Power Meter (600A)	
PM-4324-1000P		Modbus RTU, Multi-Channel Power Meter (1000 A)	
PM-4324-100P-MTCP		Modbus TCP, Multi-Channel Power Meter (60 A)	
PM-4324-160P-MTCP		Modbus TCP, Multi-Channel Power Meter (100 A)	
PM-4324-240P-MTCP		Modbus TCP, Multi-Channel Power Meter (200 A)	
PM-4324-360P-MTCP		Modbus TCP, Multi-Channel Power Meter (300 A)	

Main	Software	Diversity	Mode 1
PM-4324-400P-MTCP		Modbus TCP, Multi-Channel Power Meter (400 A)	
PM-4324-600P-MTCP		Modbus TCP, Multi-Channel Power Meter (600A)	
PM-4324-1000P-MTCP		Modbus TCP, Multi-Channel Power Meter (1000A)	
PM-4324-100P-CPS		CANOpen, Multi-Channel Power Meter (60 A)	
PM-4324-160P-CPS		CANOpen, Multi-Channel Power Meter (100 A)	
PM-4324-240P-CPS		CANOpen, Multi-Channel Power Meter (200 A)	
PM-4324-360P-CPS		CANopen, Multi-Channel Power Meter (300 A)	
PM-4324-400P-CPS		CANopen, Multi-Channel Power Meter (400 A)	
PM-4324-600P-CPS		CANopen, Multi-Channel Power Meter (600 A)	
PM-4324-1000P-CPS		CANopen, Multi-Channel Power Meter (1000 A)	
PM-3033		Modbus RTU, 3-phase power meter (1A/5A CT Input type)	V
PM-3033-MTCP		Modbus TCP, 3-phase power meter (1A/5A CT Input type)	
PM-3033-CPS		CANopen, 3-phase power meter (1A/5A CT Input type)	
I-8092F		High-speed 2-axis Motion Control Module with FRnet Master	V
I-8092F-X		High-speed 2-axis Motion Control Module with FRnet Master (X : The Cover is mean any color)	
I-8057W		16-channel Isolated Digital Output Module	V
I-8057W-X		16-channel Isolated Digital Output Module (X : The Cover is mean any color)	
USB-2560		4-Port Industrial USB 2.0 Hub	V
USB-2560/S		4-Port Industrial USB 2.0 Hub with GPSU06U-6	
I-7514U		Isolated 4 Channels RS-485 Repeater/Hub/Splitte	
I-7514U-X		Isolated 4 Channels RS-485 Repeater/Hub/Splitte (X : The Cover is mean any color)	
I-7514U-OEM1		Isolated 4 Channels RS-485 Repeater/Hub/Splitte	
I-7514U-OEM1-X		Isolated 4 Channels RS-485 Repeater/Hub/Splitte (X : The Cover is mean any color)	
I-8052		8-channel Isolated Digital Input Module	
I-8052-X		8-channel Isolated Digital Input Module (X:The Cover is mean any color)	
I-8052W		8-channel Isolated Digital Input Module	V
I-8052W-X		8-channel Isolated Digital Input Module (X : The Cover is mean any color)	

			Devices Descri	ption		
	Product	Manufacturer	Model Number	Serial Number	Power Co	ord
1.	Keyboard	Microsoft	1366	66903907570	Power by	PC
2.	Mouse	DELL	MOC5UO	10S02OO9	Power by	PC
3.	Monitor	DELL	U2410f	CN-OJ257M-72872-09J-0 1AL	Non-Shielded	l, 1.8m
-			% PC Keypart inf	ormation		_
	Main	Software		Diversity		Mode 1
PCI-	P8POR8U		Jniversal PCI, 8-ch Photo-MOS Relay (	annel Isolated Digital Input : Output	and 8-channel	V
PCI-	P16POR16	c	6-channel isolated	I digital input.16-channel Ph e CA-4037W cable and two		
PCI-	P16POR16U			hannel Isolated Digital Inpu MOS Relay Output	t and	
PEX	Z-P32A32	F		annel Isolated Digital Input	and 32-channel	V
PCI Express, 32-channel Optically Isolated Digital Input an 32-channel Optically Isolated Digital Open-collector output Board.(Current Sinking) Includes one CA-4037B cable and two CA-4002 D-Sub connectors.		ector output				
PISC	PISO-PS400 PCI Bus, High Speed 4-axis Motion Control Card				V	
PCI-	2602U		Universal PCI, 1 MS/s High-Speed, 16-channel Analog Input, 2-channel Analog Output and 32-channel DIO			V
PIO-DA4		PCI bus 4-channel D/A board. Includes one CA-4002 D-Sub connector.				
PIO	·DA4/S	F	PCI bus 4-channel	D/A board Includes DN-37.		
PIO	DA4U		Jniversal PCI 4-cha D-Sub connector.	annel D/A board Includes or	ne CA-4002	
PIO	·DA4U/S	F	PIO-DA4U with DN	-37 Includes one CA-3710 [	D-Sub cable.	
PIO	-DA8		PCI bus 8-channel connector.	D/A board. Includes one CA	-4002 D-Sub	
PIO	DA8/S	F	PCI bus 8-channel	D/A board Includes DN-37.		
PIO	DA8U		Jniversal PCI 8-cha D-Sub connector.	annel D/A board Includes or	ne CA-4002	
PIO	DA8U/S	F	PIO-DA8U with DN	-37 Includes one CA-3710 [	D-Sub cable.	
PIO	DA16		PCI bus 16-channe connector.	I D/A board. Includes one C	A-4002 D-Sub	
PIO	DA16/S	F	PCI bus 16-channe	I D/A board Includes DN-37		
PIO	DA16U		Jniversal PCI 16-cl D-Sub connector.	hannel D/A board Includes c	one CA-4002	V
PIO	DA16U/S	F	PIO-DA16U with DI	N-37 Includes one CA-3710	D-Sub cable.	
PISC	D-A64	E	Board (Current Sou wo CA-4002 D-Sul		7B cable and	V
PIS	D-730	3		l digital I/O (Input Logic High ital I/O board. (current sinki b connector.		



Main	Software	Diversity	Mode 1
PISO-730-5V		Universal PCI Bus, 32-channel isolated digital I/O (Input Logic High: 5~12 V) & 32-channel TTL digital I/O board. (current sinking)	
PISO-730U		Universal PCI Bus, 32-channel isolated digital I/O (Input Logic High: 9~24 V) & 32-channel TTL digital I/O board. (current sinking)	V
PISO-730A		32-channel isolated digital I/O & 32-channel TTL digital I/O board. (current sourcing) Includes one CA-4002 D-Sub connector.	V
PISO-730A-5V		32-channel isolated digital I/O (Input Logic High: 5~12 V) & 32-channel TTL digital I/O board. (current sourcing) Includes one CA-4002 D-Sub connector.	
PISO-730AU		Universal PCI 32-channel isolated digital I/O (Input Logic High: 5~12 V) & 32-channel TTL digital I/O board. (current sourcing) Includes one CA-4002 D-Sub connector.	
PEX-1202H		32-ch, 12-bit, 44 kS/s High Gain Multi-function DAQ Board (1 K word FIFO) Includes one CA-4002 D-Sub connector.	
PEX-1202L		32-ch, 12-bit, 110 kS/s Low Gain Multi-function DAQ Board (1 K word FIFO) Includes one CA-4002 D-Sub connector.	V
PEX-D96S		PCI Express, 96-channel DIO board (SCSI II Connector, RoHS)	V

Support Unit							
	Product	Manufacturer	Model Number	Serial Number	Power Cord		
1.	Industrial Power Supply	ICP DAS	DP-1200	N/A	Non-Shielded, 1.7m with one core		

## 3.4. Test Site Environment

Items	Test Item	Required (IEC 60068-1)	Actual
Temperature (°C)	FCC part 15:	15-35	26
Humidity (%RH)	15.107	25-75	60
Barometric pressure (mbar)	Conducted Emission	860-1060	950
Temperature (°C)	FCC part 15:	15-35	26
Humidity (%RH)	15.109	25-75	60
Barometric pressure (mbar)	Radiated Emission	860-1060	950