

# ICP DAS

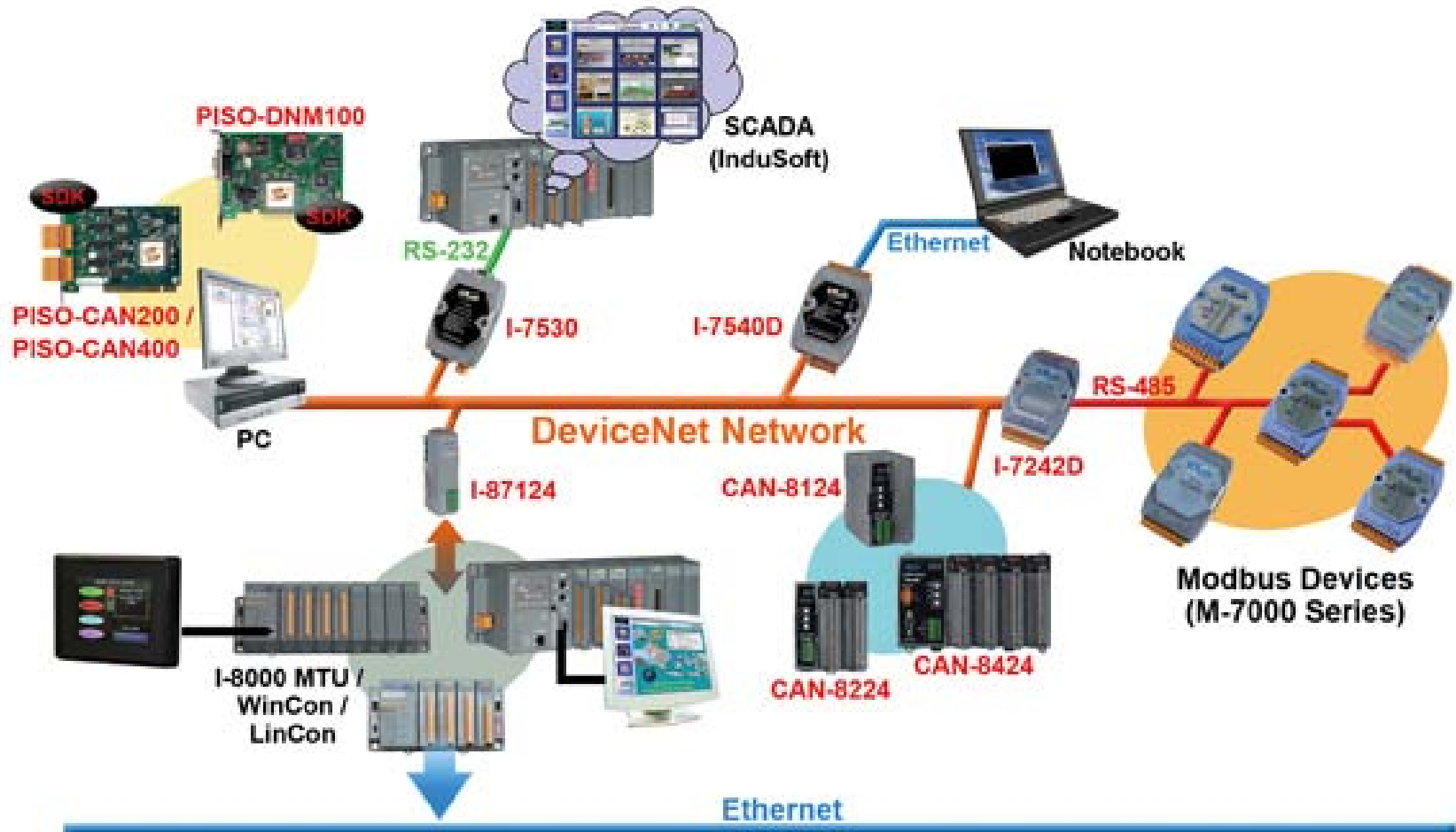
## DeviceNet Total solutions

### 2013



Industrial Computer Product Data Acquisition System

# Application Solutions



# DeviceNet Series in ICP DAS



# DeviceNet Master Solutions

DeviceNet Master Products		
PC Board + DeviceNet Master Library	PISO-CAN 200U	2-port CAN bus Universal PCI Board
	PISO-CAN 400U	4-port CAN bus Universal PCI Board
	PEX-CAN 200i	2-port CAN bus PCI-Express Board
	PCM-CAN 100	1-port CAN bus PCI-104 Board
	PCM-CAN 200	2-port CAN bus PCI-104 Board
	PCM-CAN 200P	2-port CAN bus PC-104+ Board
PC Board	PISO-DNM100U	1-port Built-in DeviceNet Master Firmware Communication Board
	PISO-DNS100U	1-port Built-in DeviceNet Slave Firmware Communication Board
PAC	I-87124	1-port DeviceNet Master I-87K Module
	I-8124W	1-port DeviceNet Master I-8K Module
USB	I-7565-DNM	USB to DeviceNet Master Converter

# DeviceNet PC Board Solutions

- PISO-CAN200U (2-port CAN + DeviceNet Master Library)
- PISO-CAN400U (4-port CAN + DeviceNet Master Library)

## Feature :

- Universal PCI Interface.
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 and UCMM connection.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 63 slave nodes per channel.**
- **Support searching slave function.**
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



PISO-CAN 200U



PISO-CAN 400U



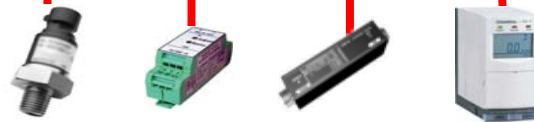
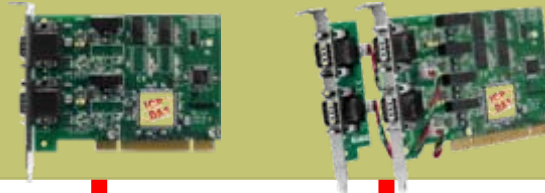
# DeviceNet PC Board Solutions

- PISO-CAN200U (DeviceNet Master Library)



**DeviceNet Master Library**

**PISO-CAN Driver**



**DeviceNet I/O Devices**





# DeviceNet PC Board Solutions

- **PEX-CAN200i (2-port CAN + DeviceNet Master Library)**

Feature :

- PCI-Express Interface.
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 and UCMM connection.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 63 slave nodes per channel.**
- **Support searching slave function.**
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



# DeviceNet PC Board Solutions

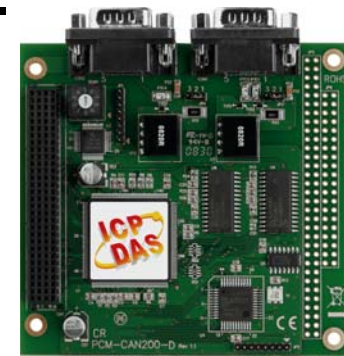
- PCM-CAN 100 (1-port CAN + DeviceNet Master Library)
- PCM-CAN 200 (2-port CAN + DeviceNet Master Library)

## Feature :

- PCI-104 Interface.
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 and UCMM connection.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 63 slave nodes per channel.**
- **Support searching slave function.**
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



PCM-CAN 100



PCM-CAN 200



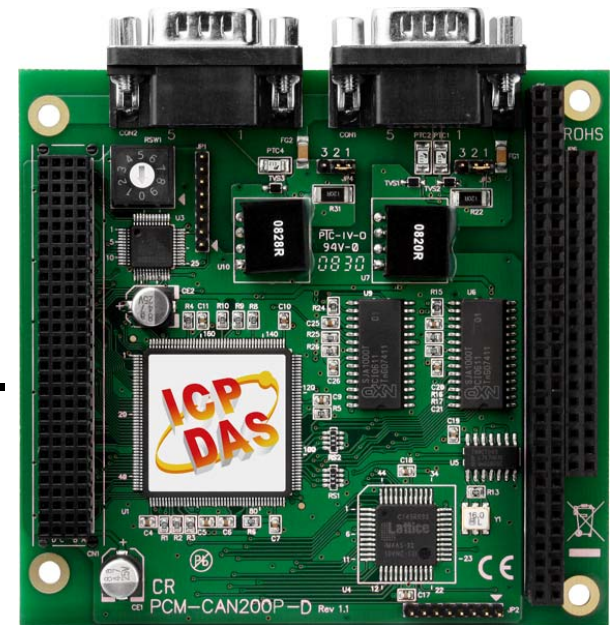


# DeviceNet PC Board Solutions

- **PCM-CAN 200P (2-port CAN + DeviceNet Master Library)**

**Feature :**

- PCI-104+ Interface.
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 and UCMM connection.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 63 slave nodes per channel.**
- **Support searching slave function.**
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



# DeviceNet PC Board Solutions

- **PISO-DNM100U (Built-in DeviceNet Master Board)**

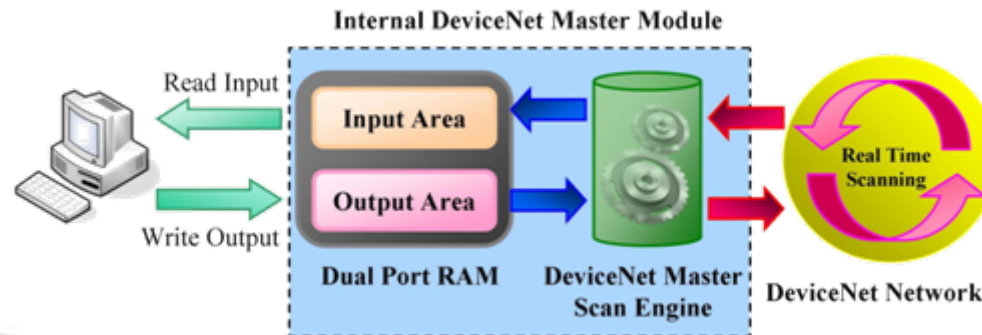
Feature :

- Universal PCI Interface.
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 and UCMM connection.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 63 slave nodes per channel.**
- **Support searching slave function.**
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



# DeviceNet PC Board Solutions

- PISO-DNM100U (Built-in DeviceNet Master Board)



# DeviceNet PC Board Solutions

- **PISO-DNS100U (Built-in DeviceNet **Slave** Board)**

Feature :

- Universal PCI Interface.
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 only Server.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 10 slave nodes inside the board.**
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



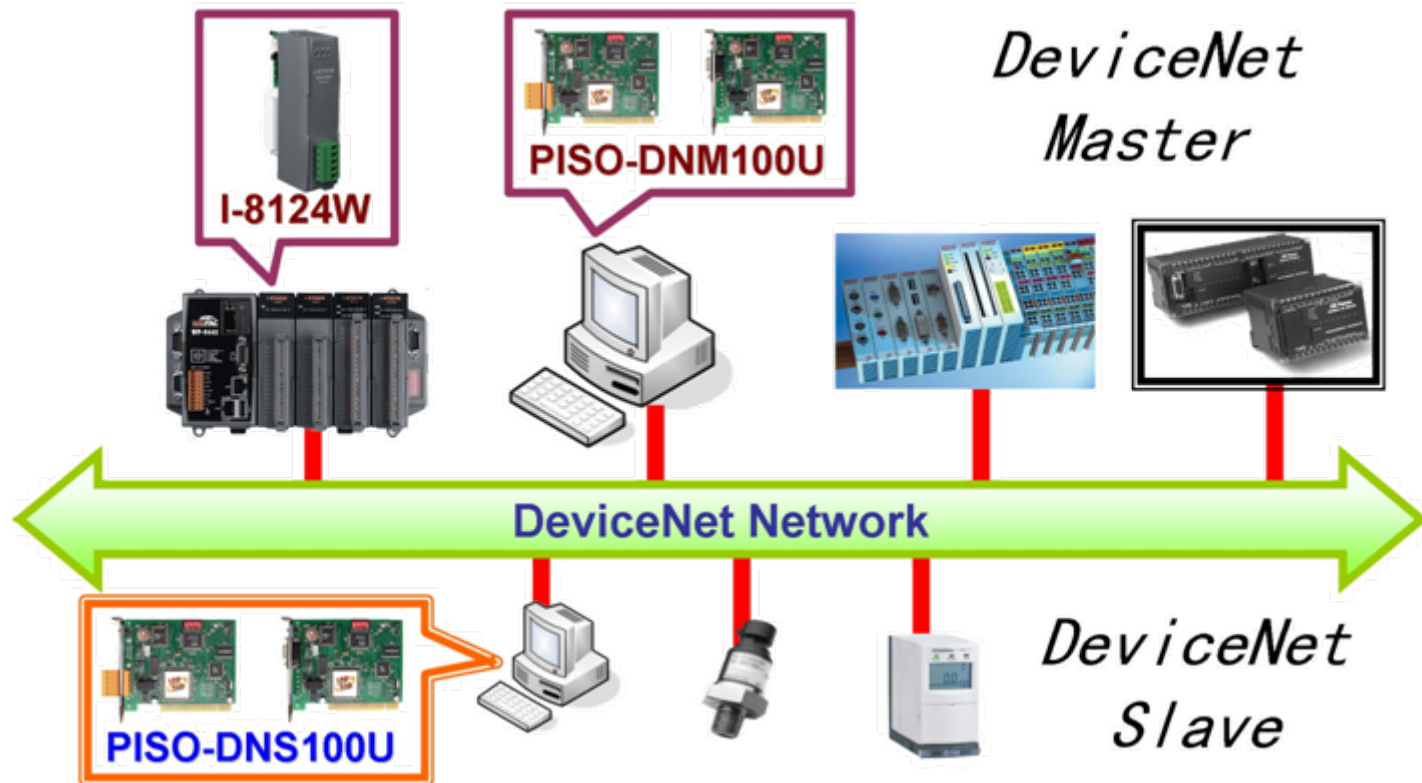
DeviceNet  
Slave !!

✓  
RoHS



# DeviceNet PC Board Solutions

- PISO-DNS100U (Built-in DeviceNet **Slave** Board)





# DeviceNet PAC Solutions

- **I-87124 (I-87K DeviceNet Master Module)**

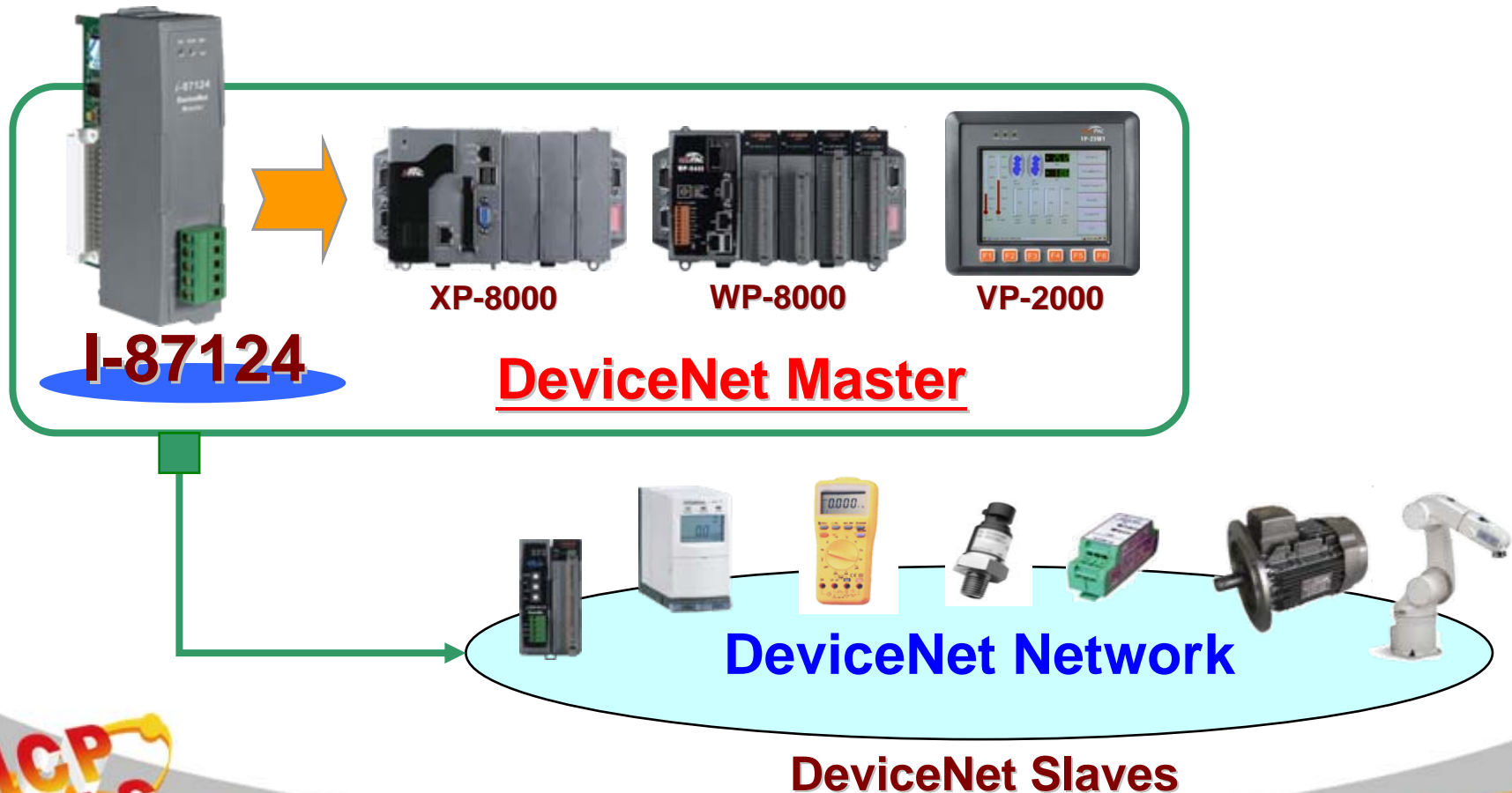
Feature :

- **I-87K serial port communication mechanism.**
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 and UCMM connection.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 63 slave nodes per channel.**
- **Support searching slave function.**
- Support XPAC / WinPAC / ViewPAC controller.
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



# DeviceNet PAC Solutions

- I-87124 (I-87K DeviceNet Master Module)



# DeviceNet PAC Solutions

- **I-8124W (I-8K DeviceNet Master Module)**

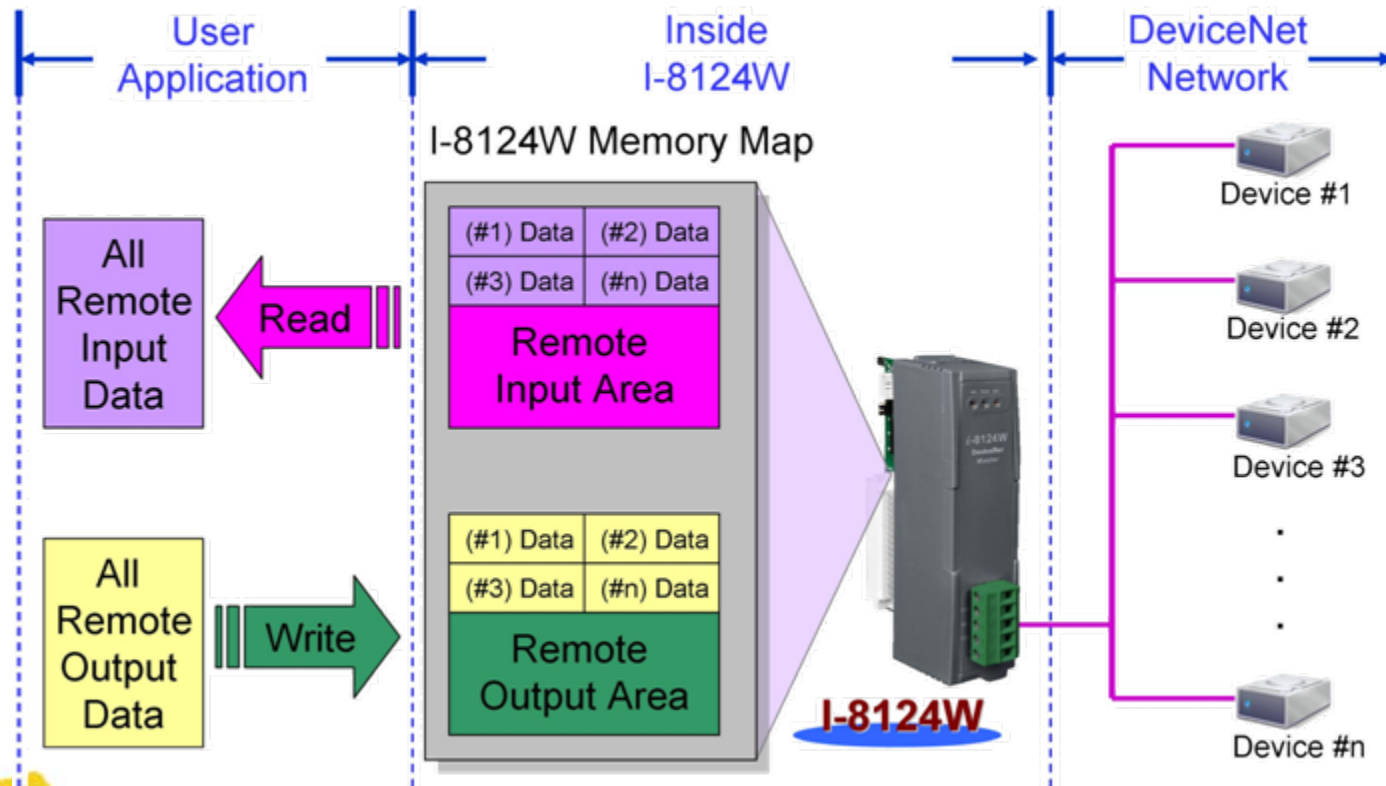
Feature :

- **I-8K serial port communication mechanism.**
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 and UCMM connection.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 63 slave nodes per channel.**
- **Support searching slave function.**
- Support XPAC / WinPAC / ViewPAC controller.
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



# DeviceNet PAC Solutions

- I-8124W (I-8K DeviceNet Master Module)



# DeviceNet USB Solutions

- **I-7565-DNM (USB / DeviceNet Master Module)**

Feature :

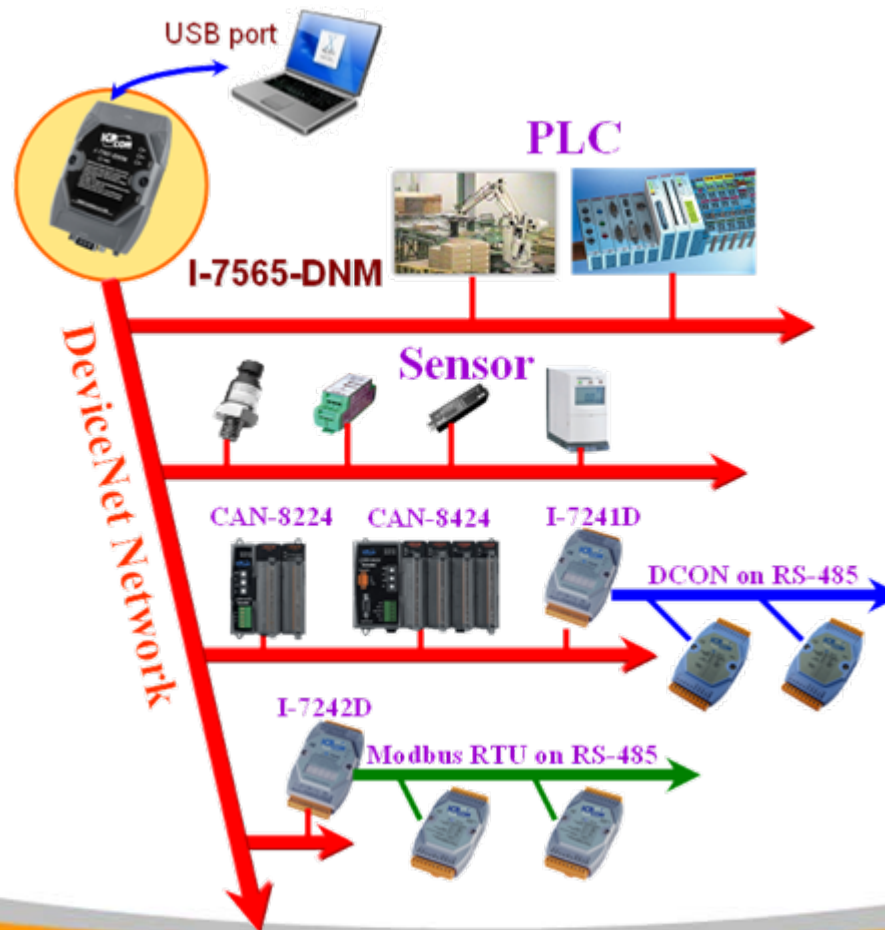
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 and UCMM connection.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 63 slave nodes per channel.**
- **Support searching slave function.**
- **Powered by USB.**
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.





# DeviceNet USB Solutions

- I-7565-DNM (USB / DeviceNet Master Module)



# DeviceNet Gateway Solutions

DeviceNet Gateway Products	
I-7241D	DeviceNet Slave / DCON Master Gateway Module
I-7242D	DeviceNet Slave / Modbus RTU Master Gateway Module
GW-7243D	DeviceNet Slave / Modbus RTU & TCP Gateway Module
GW-7434D	DeviceNet Master / Modbus TCP Server Gateway Module



# DeviceNet Gateway Solutions

- **I-7241D (DeviceNet Slave / DCON Master Gateway)**

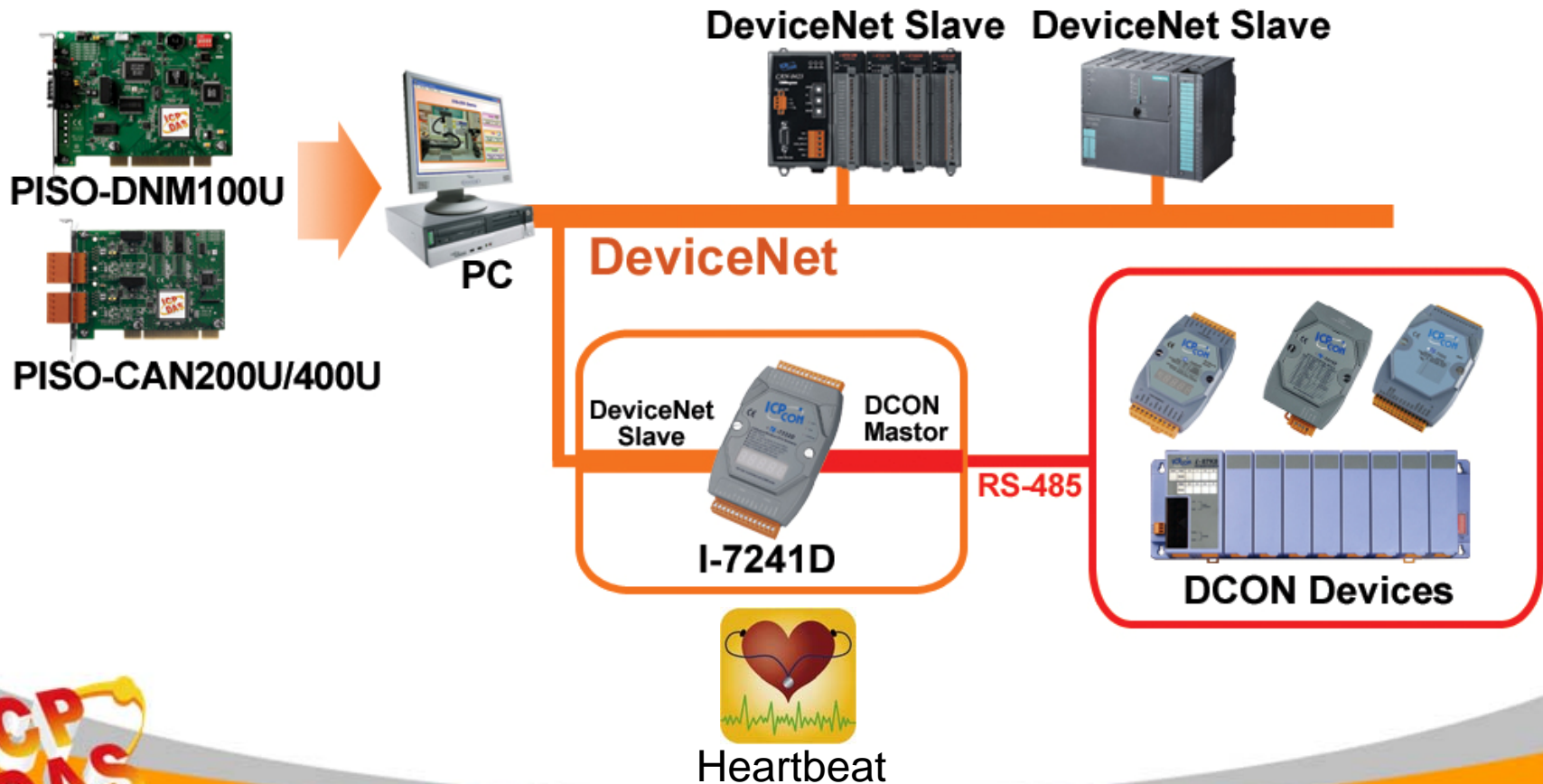
**Feature :**

- DeviceNet Volume I & II, Release 2.0
- Support Group 2 only Server.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- **Support Offline Connection Set / Device Heartbeat message and Device Shutdown message.**
- Support Max. 15 I-7K/I-87K IO modules.
- Provide friendly Utility to configure.
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



# DeviceNet Gateway Solutions

- I-7241D (DeviceNet Slave / DCON Master Gateway)



# DeviceNet Gateway Solutions

- **I-7242D (DeviceNet Slave / Modbus RTU Master Gateway)**

## Feature :

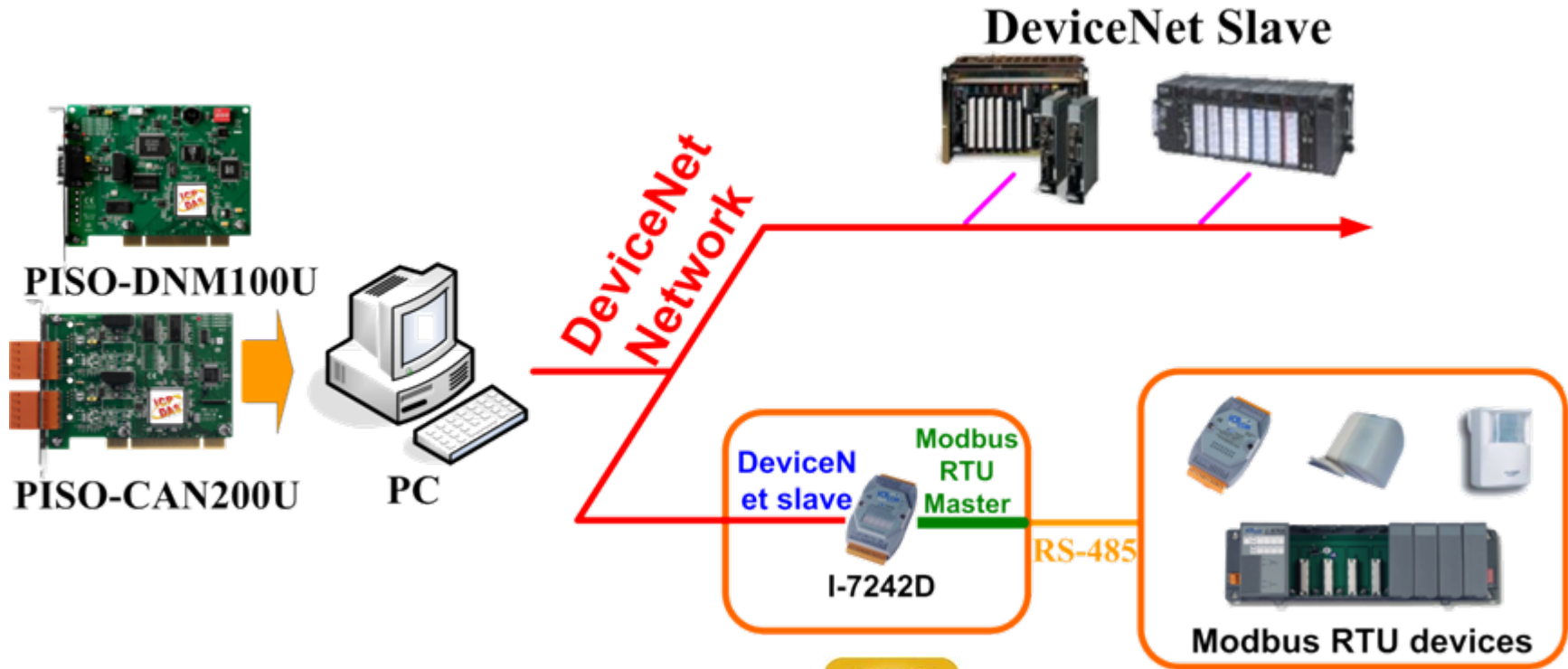
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 only Server.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- **Support Offline Connection Set / Device Heartbeat message and Device Shutdown message.**
- Support Max. 10 Modbus slave modules.
- Provide friendly Utility to configure.
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.





# DeviceNet Gateway Solutions

- I-7242D (DeviceNet Slave / Modbus RTU Master Gateway)



Heartbeat



# DeviceNet Gateway Solutions

- **GW-7243D (DeviceNet Slave / Modbus TCP & RTU Gateway)**

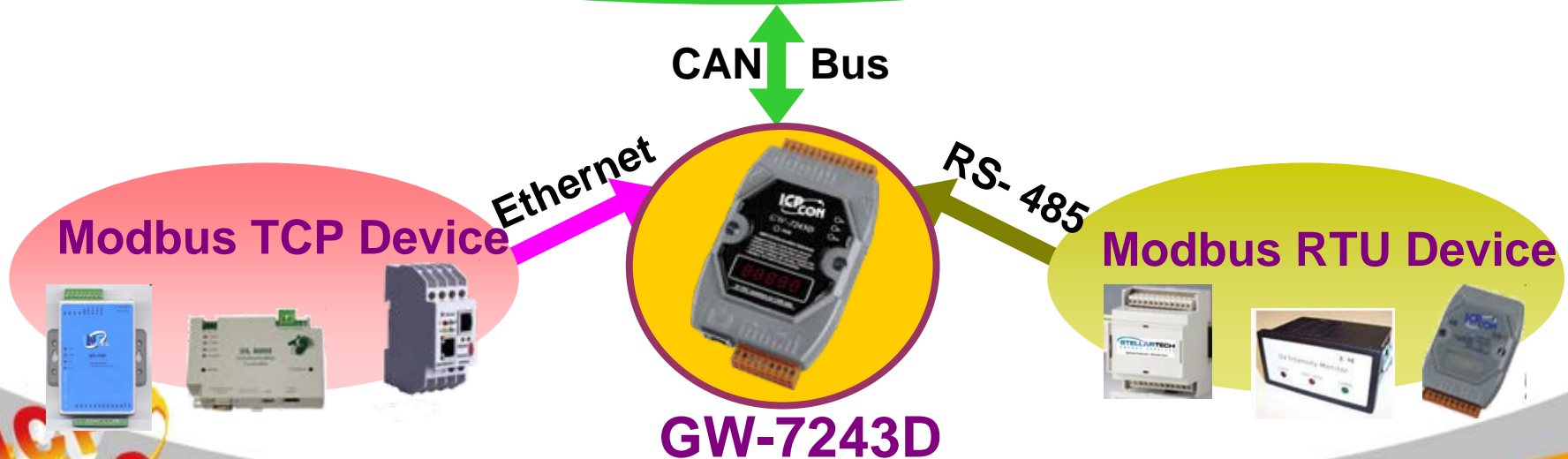
Feature :

- DeviceNet Volume I & II, Release 2.0
- Support Group 2 only Server.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- **Support Offline Connection Set / Device Heartbeat message and Device Shutdown message.**
- Support Max. 10 Modbus RTU commands.
- Support Max. 5 Modbus TCP commands
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.



# DeviceNet Gateway Solutions

- GW-7243D (DeviceNet Master / Modbus TCP & RTU Gateway)



# DeviceNet Gateway Solutions

- **GW-7434D (DeviceNet Master / Modbus TCP Server Gateway)**

Feature :

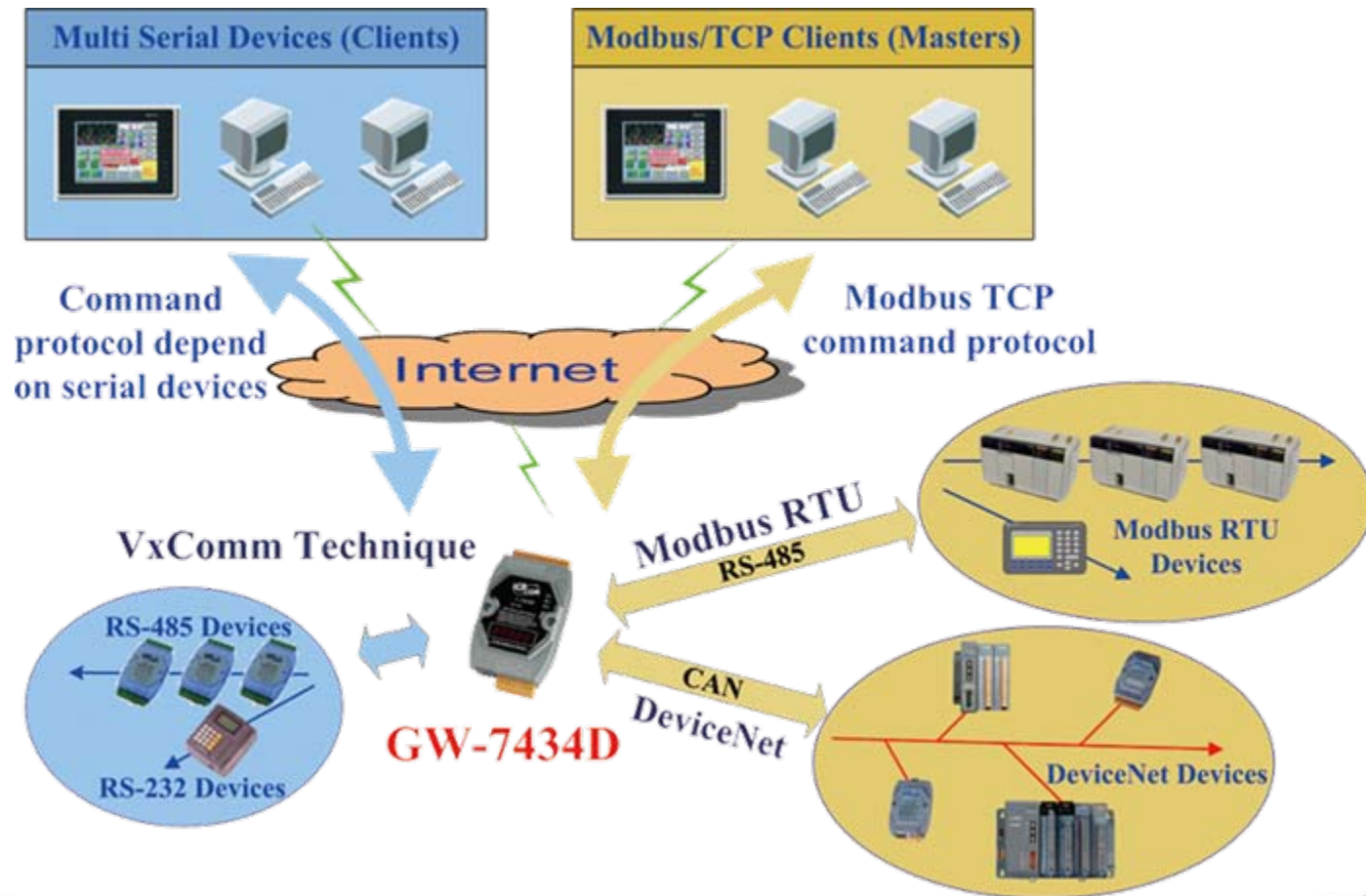
- DeviceNet Volume I & II, Release 2.0
- Support Group 2 and UCMM connection.
- **Support Poll / Bit-Strobe / COS / Cyclic operation mode.**
- Support 512 input/output bytes per slave.
- **Support 63 slave nodes per channel.**
- **Support searching slave function.**
- Support "Set/Get Explicit Message" methods via Modbus TCP/RTU command.
- 2500 Vrms isolation on CAN bus
- 3 kV galvanic isolation among power supply.





# DeviceNet Gateway Solutions

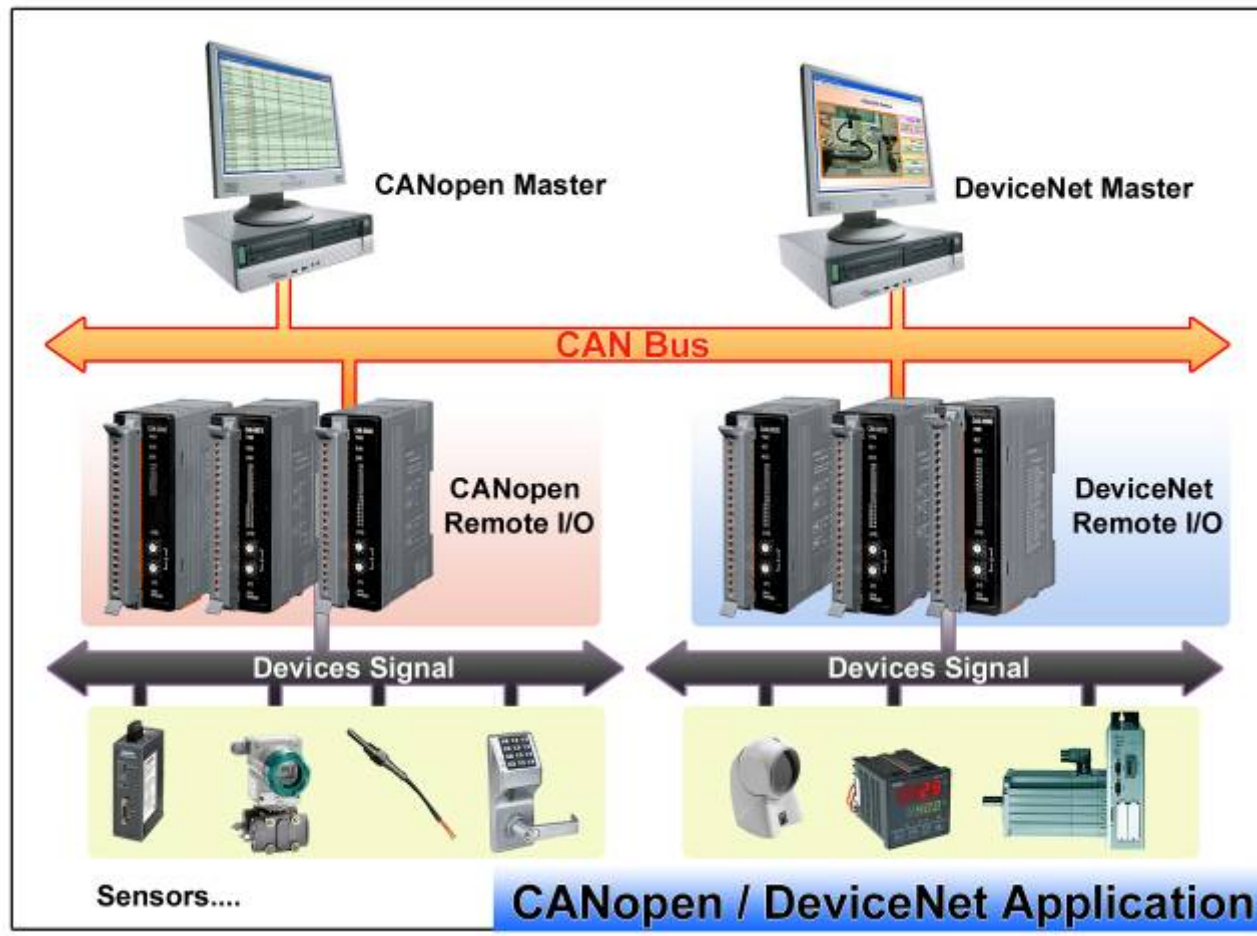
- GW-7434D (DeviceNet Master / Modbus TCP Server Gateway)





# CAN bus Remote I/O Solutions

- DeviceNet : CAN-8x23 and CAN-2000C Series
- DeviceNet: CAN-8x24 and CAN-2000D Series



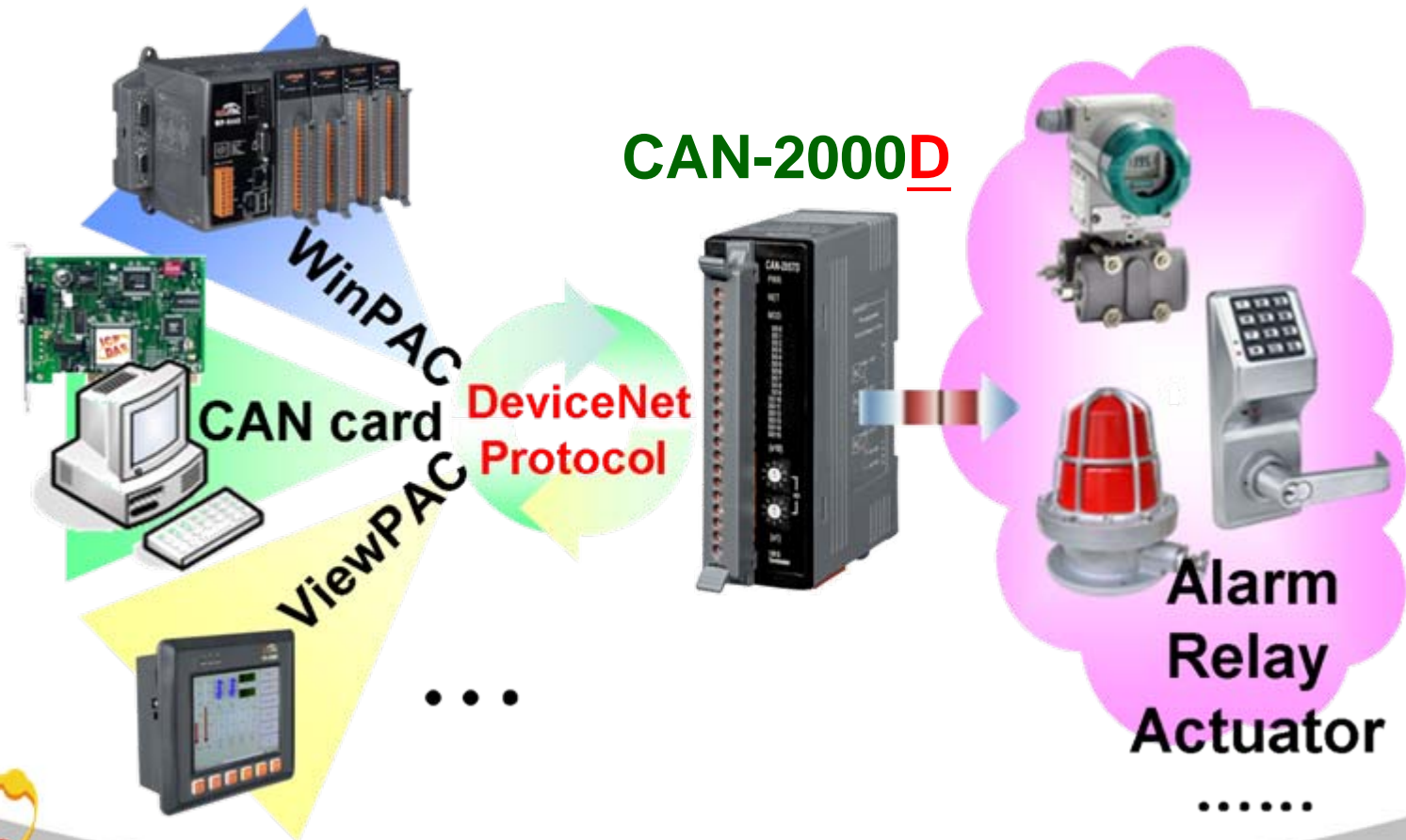
# DeviceNet Remote I/O Solutions

DeviceNet Remote I/O Products	
<b>CAN-2053D</b>	<b>DeviceNet 16-channel Isolated DI Module</b>
<b>CAN-2054D</b>	<b>DeviceNet 8-channel DI and 8-channel DO Module</b>
<b>CAN-2057D</b>	<b>DeviceNet 16-channel Isolated DO Module</b>
<b>CAN-2017D</b>	<b>DeviceNet 8-channel Analog Input Module</b>
<b>CAN-2024D</b>	<b>DeviceNet 4-channel Analog Output Module</b>
<b>CAN-2088D</b>	<b>DeviceNet PWM Module</b>
<b>CAN-8124</b>	<b>1 Slot General Purpose DeviceNet Slave I/O Unit</b>
<b>CAN-8224</b>	<b>2 Slot General Purpose DeviceNet Slave I/O Unit</b>
<b>CAN-8424</b>	<b>4 Slot General Purpose DeviceNet Slave I/O Unit</b>



# DeviceNet Remote I/O Solutions

- CAN-2000D Series I/O Module

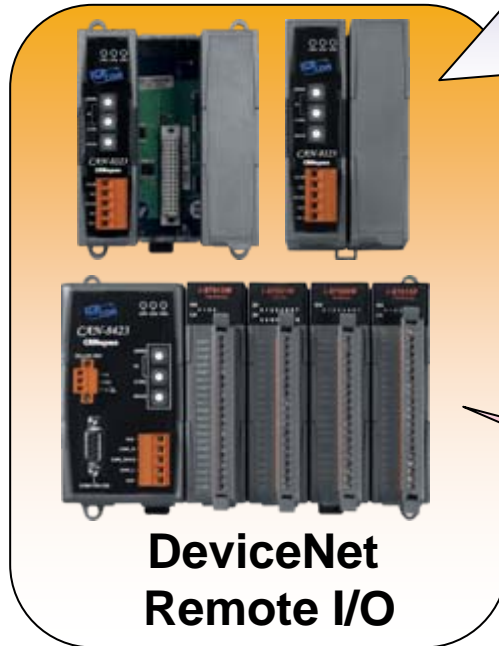


# DeviceNet Remote I/O Solutions

- **CAN-8x24 Series I/O Module**



DeviceNet Master



DeviceNet Remote I/O

**DI / DO**  
**AI / AO**  
**RTD**  
**Thermocouple**  
**Counter**  
**PWM**  
.....

**I-8000 I/O Module**  
**I-87K I/O Module**



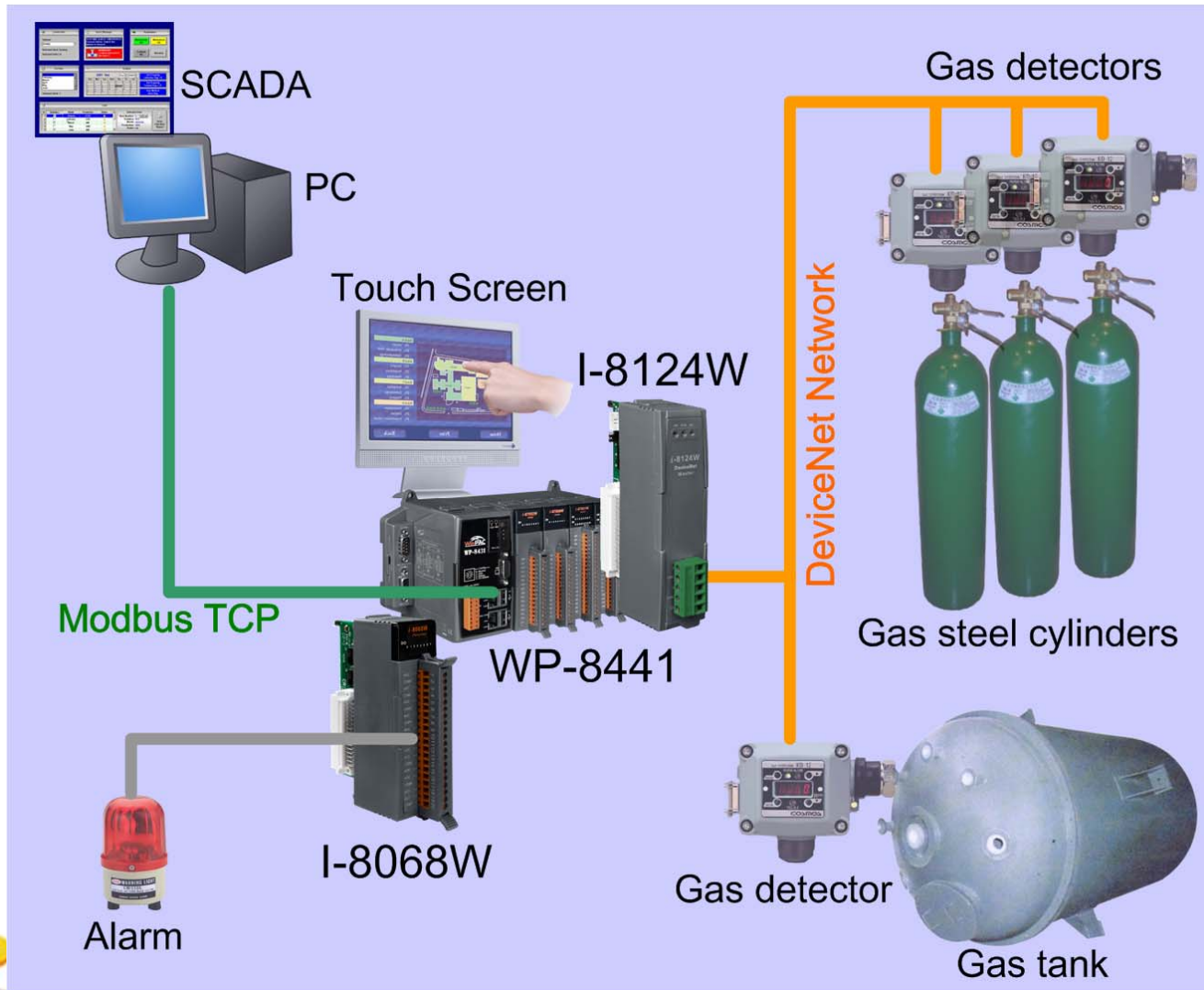
# Application References



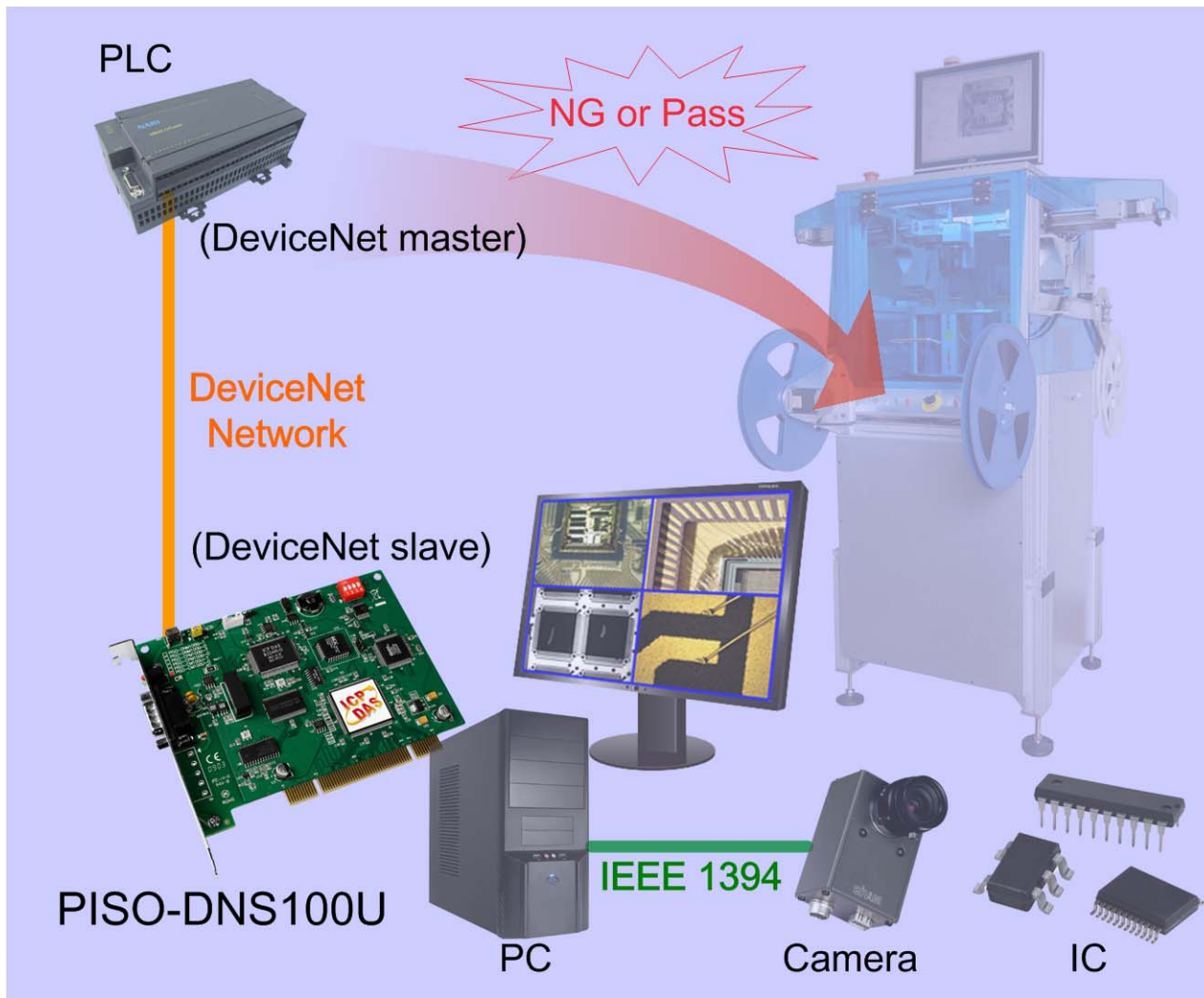
Industrial Computer Product Data Acquisition System



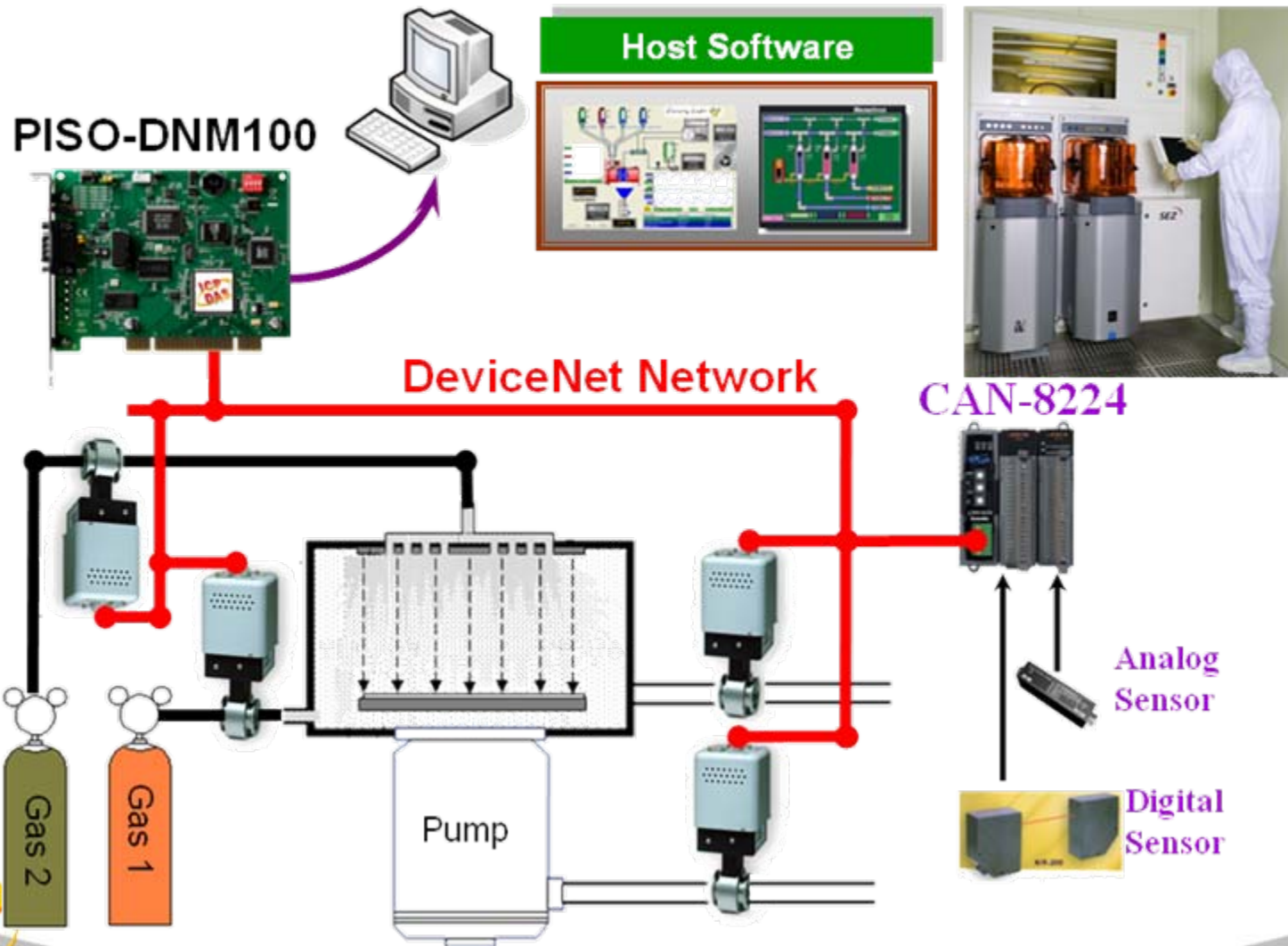
# Gas Detection System



# IC Inspection Machine



# CVD/PECVD Semiconductor Machine

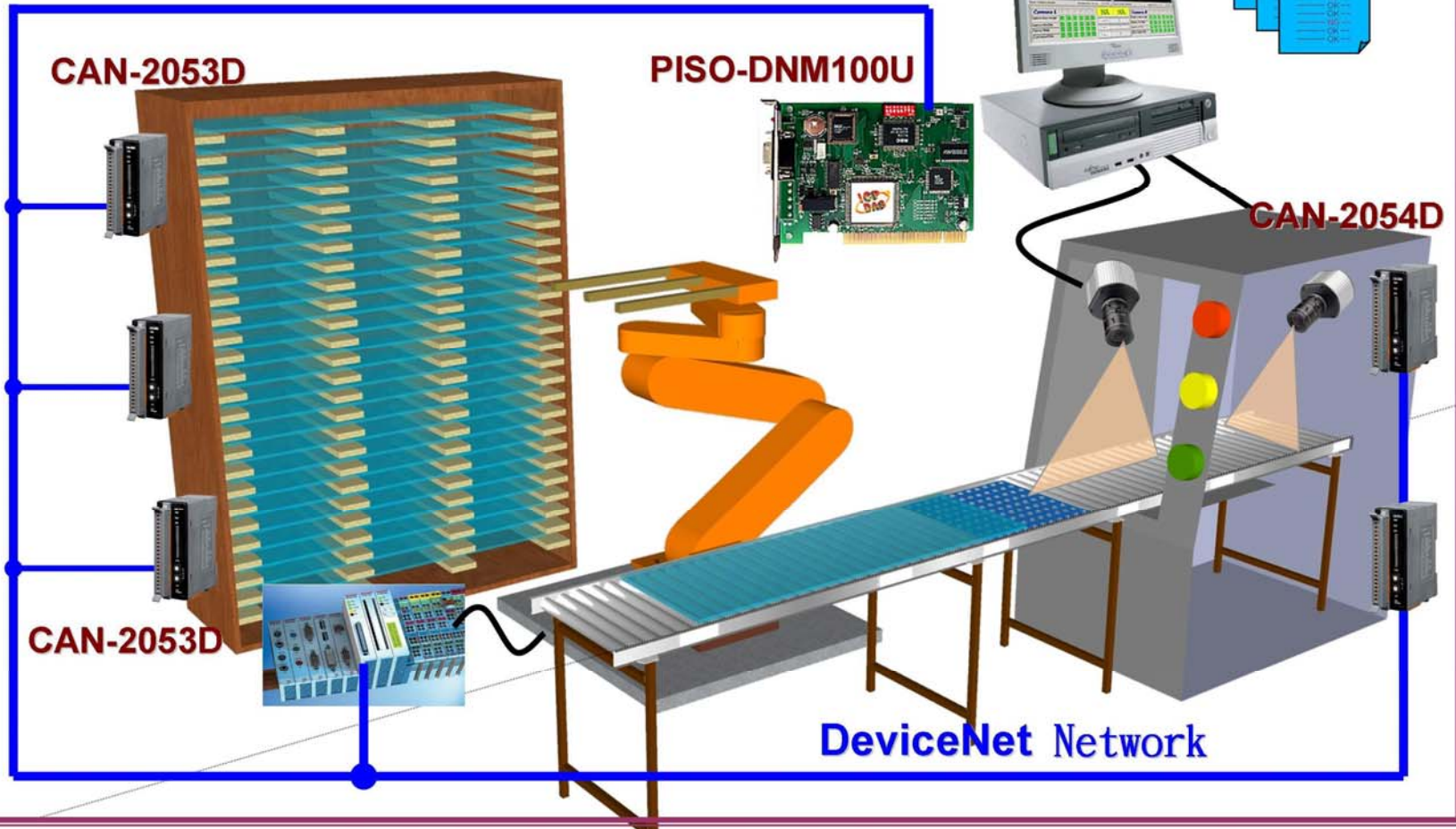




# LCD Glass Inspection System



DeviceNet Network



Industrial Computer Product Data Acquisition System

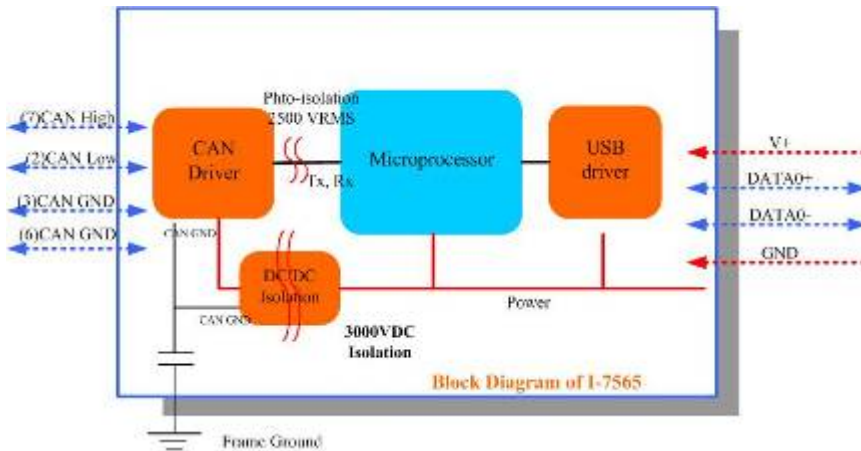
# All tools are free!!





# High protection and Certification

- DC/DC power supply to galvanically isolated bus drivers
- Photo-isolation protection on bus
- 4KV ESD protection
- CE, FCC certification



# The Advantage in ICP DAS

- All kinds of CAN total Solutions
- DeviceNet/DeviceNet protocol series
- CAN ODM products
- Good technology support Team





# Thank You

