

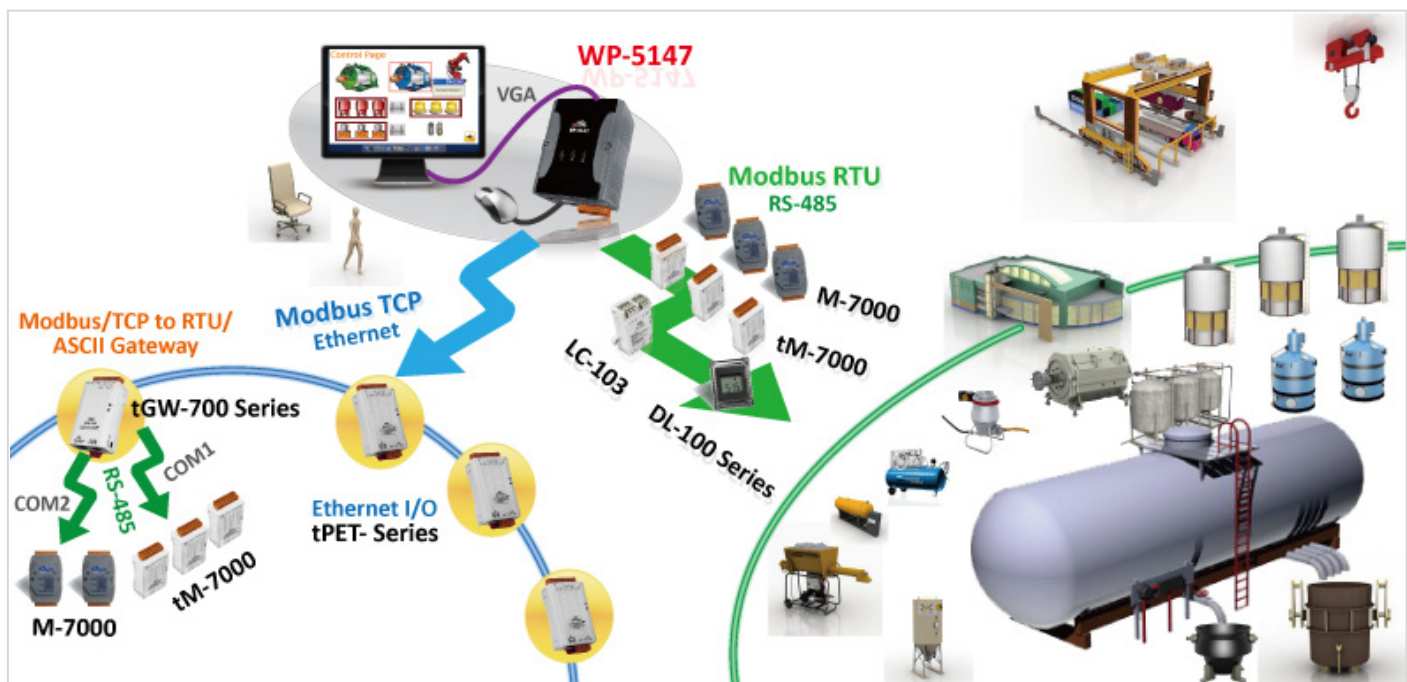
HMI and Device Control on a Large Screen using a Small PAC

ISaGRAF & Soft-GRAF Software + WP-5147 PAC + Modbus I/O



Looking for an affordable, high-quality solution for HMI and device control?

For many years, ICP DAS has continued to make steady progress by tailoring a wide variety of products targeted at individual industries in order to meet the needs of specific customers. Application fields now covered include industrial automation and control, transportation, educational institutions, government agencies, and so on. Consequently, with cost considerations in mind, ICP DAS has created a unique combination of perfect solutions that can be implemented in a wide range of applications.



Affordable, High-quality Monitoring solution:

- + WinPAC Series Palm Size PAC: WP-5147
- + A wide range of Remote I/O Modules (Modbus TCP, Modbus RTU/ASCII, DCON)
- + SoftLogic Software: ISaGRAF
- + HMI Designer: Soft-GRAF Studio (**Free!**)



ICP DAS is the general agent for **InduSoft** in the Greater China region, and we highly recommend that you take advantage of this powerful SCADA software. Please contact us for more information, or visit: <http://www.icpdas.com/products/Software/InduSoft/indusoft.htm>

Beneath its deceptively small exterior, the WP-5147 contains a powerful and flexible soul based on ISaGRAF. By taking a creative approach, system designers can utilize ISaGRAF and Soft-GRAF Studio software to construct a simple yet dynamic and colorful HMI environment to achieve first class device control.

The following is a detailed overview of the ICP DAS solution:

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WinPAC series PAC - WP-5147

ICP DAS has recently launched the WP-5147 (WP-5147-OD, with Audio port), and is the most cost-effective Windows CE-based PAC, including an embedded Windows CE 5.0 operating system, a range of connectivity options (VGA, USB, Ethernet, RS-232 /RS-485), and an I/O expansion bus that can support a single XW board. The WP-5147 uses an industry standard 24 V power input, and can be installed where space is limited using DIN-Rail mounting.

Still using a narrow monitoring screen due to the price considerations?

Compared with the 5" or 8" or 10" HMI, the WP-5147 can use a cheaper and larger 15" or 17" or 21" large-size commercially available computer monitor to achieve the equipment control. Users no longer forced to use a small HMI due to the expensive cost of large-size HMI. Just choose the WP-5147, users can upgrade it to a 15" or above monitoring screen to experience an excellent new vision.

WP-5147 support multiple Modbus protocol

For the upper layer (Client), the WP-5147 supports the Modbus TCP and Modbus RTU protocols and allows it to be connected to common SCADA software, such as InduSoft, iFix, InTouch, Wizon or Citect, etc. A single WP-5147 provides connections to 1 to 16 hosts (up to a maximum of 32).

For the lower layer (Equipment), the WP-5147 supports the following protocols:

1. Modbus RTU/ASCII:

You can choose from any of the ICP DAS M-7000 series I/O modules, DL-100 temperature and humidity meters, tM series I/O modules, LC series lighting control modules or Wireless ZigBee I/O modules. Other brands of I/O devices that support the Modbus RTU/ASCII protocol can also be selected.

2. DCON:

You can choose from any of the ICP DAS I-7000 series I/O modules, which all support the DCON protocol.

3. Modbus TCP:

The WP-5147 can be used as a Modbus TCP Master to connect to a wide range of Modbus TCP Slave devices. This means that you can choose from any of the ICP DAS ET-7000 and tET series I/O modules, or use the ICP DAS tGW-700 series Modbus TCP to RTU/ASCII gateway to expand the remote device network.

4. User-Defined Protocol:

The embedded ISaGRAF Driver in the WP-5147 allows you to create custom protocols by using RS-232/422/485 communication function blocks (such as COMOPEN or COMREAD and so on), and then implementing them on the corresponding devices.

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I/O Expansion

The WP-5147 allows you to expand the local I/O connection options by attaching a single XW series board . You can currently choose from the models indicated below, but ICP DAS will be releasing additional XW series boards in the near future to allow even greater flexibility.

(Note: The WP-5147 does not provide support for XW5xx series boards when expanding RS-232/422/485 port connectivity)

Model	DI Channels	DO Channels	AI Channels	A0 Channels	Isolation
XW107	8	8	-	-	-
XW107i	8	8	-	-	3750 Vrms
XW110i	16	-	-	-	3750 Vrms
XW304	4	4	6	1	-
XW310	3	3	4	2	-

SoftLogic Software - ISaGRAF

When using ISaGRAF software, the WP-5147 supports a range of IEC 61131-3 standard PLC programming languages, including Quick Ladder (LD), Function Block Diagram (FBD), Sequential Function Chart (SFC), Structured Text (ST), and so on, which enables you to quickly design and develop dynamic and user-friendly custom applications.

HMI Designer - Soft-GRAF Studio (Free!)

Soft-GRAF Studio is an HMI software platform developed by ICP DAS. Editing the HMI pages is achieved via a simple drag-and-drop process, and a variety of HMI objects are provided in the included library to help you get started. With ISaGRAF software, it is easy to create a professional monitoring application without requiring any complex programming skills or knowledge.

As you can see, ICP DAS has meticulously designed the most cost-effective combination for you. By selecting the WinPAC WP-5147, you can instantly improve your monitoring system at a lower cost, while enhancing your competitiveness within your industry. What are you waiting for?

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For more information, please visit the following webpages:

WP-5147: http://www.icpdas.com/root/product/solutions/softplc_based_on_pac/isagraf/isagraf_pac/wp-5147.html

ISaGRAF: http://www.icpdas.com/root/product/solutions/softplc_based_on_pac/isagraf/isagraf.html

Soft-GRAF: http://www.icpdas.com/root/product/solutions/softplc_based_on_pac/soft_graf/soft-graf.html

XW-board: http://www.icpdas.com/root/product/solutions/pac/upac/xw-board_selection.html

Remote I/O Modules: http://www.icpdas.com/root/product/solutions/remote_io/remote_io_products.html

tGW-700 Gateway: <http://www.icpdas.com/products/Industrial/pds/tgw-700.htm>