

## How to use The ISaGRAF PAC plus i-87113DW - the master card of the Carlson Strain Gauge Inputs ?

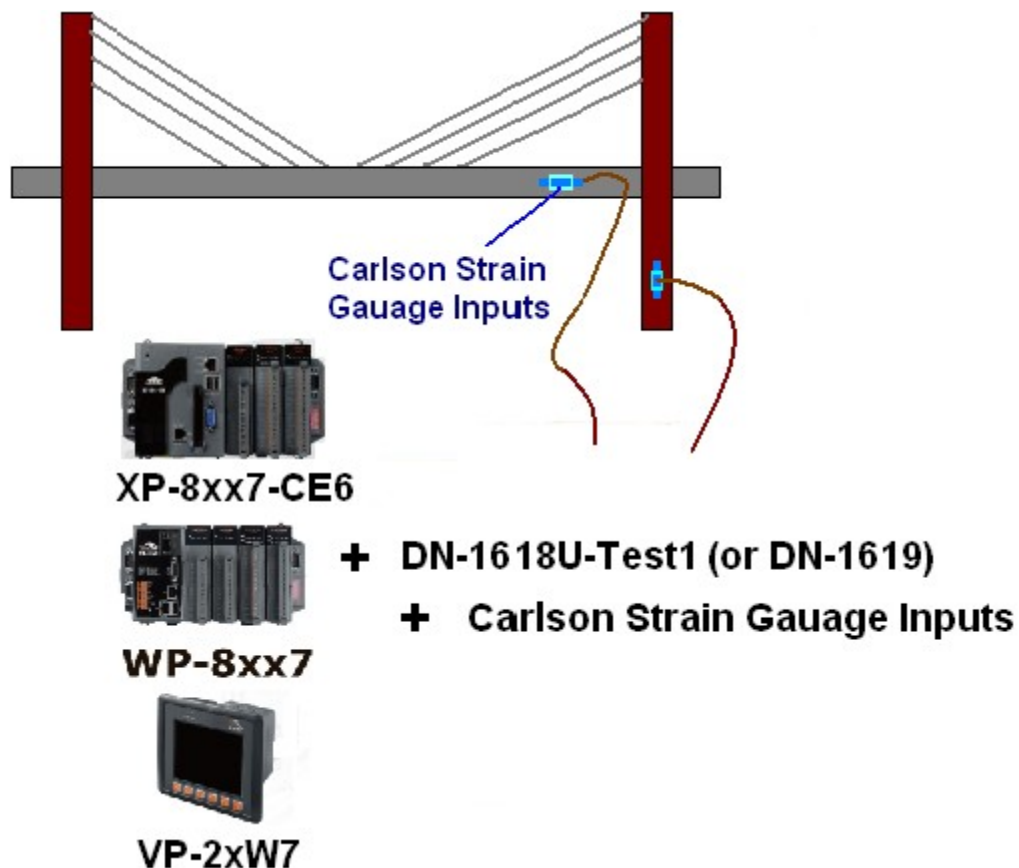
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The following ISaGRAF PACs can support the i-87113DW (the master card of Carlson Strain Gauge Inputs) plus the DN-1618U-Test1 (daughter board) . Please make sure if your ISaGRAF PAC has the correct ISaGRAF driver installed.

	ISaGRAF driver version	I/O Slot number supported
<b>XP-8xx7-CE6</b>	Version 1.03 or later	1 ~ 7, max 7 i-87113DW (the leftmost is slot-1)
<b>WinPAC-8xx7</b>	Version 1.23 or later	0 ~ 7, max 8 i-87113DW (the leftmost is slot-0)
<b>VP-25W7/23W7</b>	Version 1.14 or later	0 ~ 2, max 3 i-87113DW (the leftmost is slot-0)

Each i-87113DW can connect max. four DN-1618U-Test1 daughter boards. Each DN-1618U-Test1 can connect max. 8 channels of Carlson Strain Gauge Inputs. So each i-87113DW can measure max.  $8 \times 4 = 32$  channels.)

The new released ISaGRAF driver : <http://www.icpdas.com/products/PAC/i-8000/isagraf-link.htm>

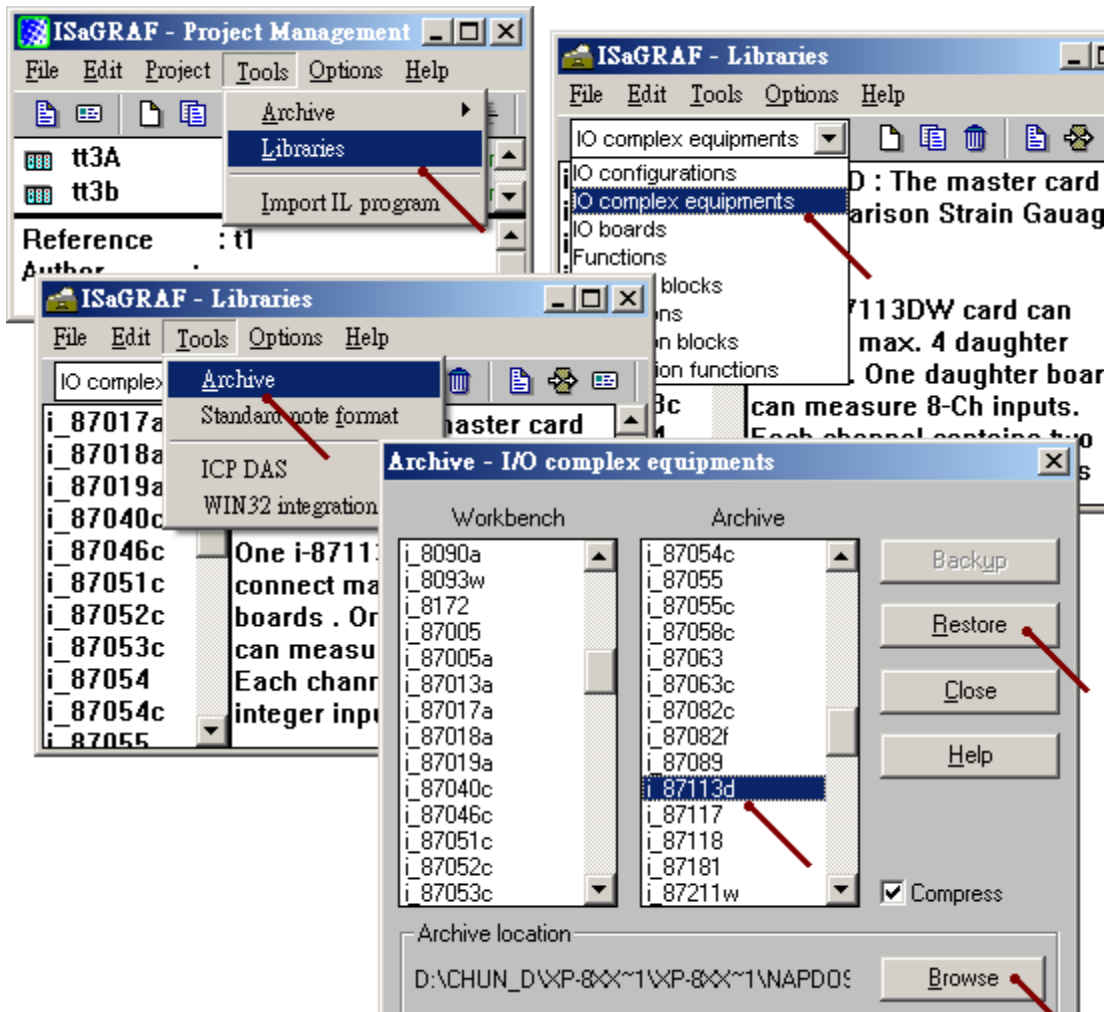


This figure is only for introduction. The dimension and configuration should depend on the real application.

Every DN-1618U-Test1 has one 8-bit dip-switch to set its NET-ID. If only one DN-1618U-Test1 connected by the i-87113DW , please set its NET-ID to 1 (turn its Dip 1 to “ON” position). If two connected, please set the first one as 1 , the other DN-1618U-Test1 should set as 2. (turn its Dip 2 to “ON”) . If three connected, please set the first one as 1 , the second one as 2, the last DN-1618U-Test1 as 3 (turn its Dip 1 and 2 to “ON”) . If there is four DN-1618U-Test1 connected, please set the first one as 1, the second one as 2, the third one as 3 and the last DN-1618U-Test1 as 4 (turn its Dip 3 to “ON" position) .

## Write program to use i-87113DW

Please make sure if the “i\_87113d” - I/O complex equipment has been installed into the ISaGRAF workbench. The file name is “i\_87113d.xia” (visit [www.icpdas.com](http://www.icpdas.com) > FAQ > Software > ISaGRAF > 128).



To program the i-87113DW, please connect the “i\_87113d” in the associated slot No. , then set its proper parameters for all connected channels.

**Sample\_rate** : Unit is ms (0.001 sec). Value can be 2000 ~ 600000. It means the scan time-interval of channel to channel.

**daughter\_num**:The amount of DN1618U-Test1 boards connected. value can be 1 ~ 4.

**Chx\_range**: Can be 2A, 20 or 2B  
 2A:  $(R1+R2) < 3200$  ohm  
 20:  $(R1+R2) < 350$  ohm  
 2B:  $(R1+R2) < 200$  ohm

**rest\_tim** : 1-Ch. Integer output to dynamically change the “rest\_time”. Unit is second. Can be 0 ~ 36000. It means the time to rest after one scan cycle (one cycle will scan all channels connected by the in i-87113DW).

\* Each channel of the i-87113DW has 5 input-pins as listed in the next page.

\* Each channel of the i-87113DW has two integer values which are stored as long integer format. If user want to define the modbus network address to these ISaGRAF variables, please define them to occupy 2 modbus number. Please refer to section 4.2 of the “User's manual of the ISaGRAF PAC” )

