

Performance Comparison Table 1 of ISaGRAF PACs

PACs	CPU	Normal running Speed (Normal PLC scan-time)	Normal Speed for floating point calculation (scan-time)	Ethernet	ISaGRAF code size limitation (bytes)	Memory for running program (bytes)
WP-8147 WP-8447 WP-8847	PXA270 520 MHz or compatible	About 10~30 (3~15 ms)	About 10~30 (3~15 ms)	2 ports 10/100 Mbps	1 MB	About 20~40 MB
W-8347 W-8747	Strong-ARM 206 MHz or compatible	About 10~20 (3~15 ms)	About 10~20 (3~15 ms)	2 ports 10/100 Mbps	1 MB	About 20~40 MB
W-8337 W-8737	Strong-ARM, 206 MHz or compatible	About 10~20 (3 ~15 ms)	About 10~20 (3 ~15 ms)	1 port 10 Mbps	1 MB	About 20~40 MB
iP-8447 iP-8847	80186, 80 MHz or compatible	About 4 (2~25 ms)	About 0.8 (10~125 ms)	2 ports 10/100 Mbps	64 KB	About 768 KB
I-8437-80 I-8837-80	80186 80 MHz or compatible	About 4 (2~25 ms)	About 0.8 (10~125 ms)	1 port 10 Mbps	64 KB	About 512 KB
I-8437 I-8837	80188 40 MHz or compatible	About 1 (5~100 ms)	About 0.2 (25~500 ms)	1 port 10 Mbps	64 KB	About 512 KB
I-8417 I-8817	80188 40 MHz or compatible	About 1 (5~100 ms)	About 0.2 (25~500 ms)	No	64 KB	About 512 KB
μPAC-7186EG	80186 80 MHz or compatible	About 4 (2~5 ms)	About 0.8 (10~125 ms)	1 port 10/100 Mbps	64 KB	About 640 KB
I-7188EG	80188 40 MHz or compatible	About 1 (5~100 ms)	About 0.2 (25~500 ms)	1 port 10 Mbps	64 KB	About 512 KB
I-7188XG	80188 40 MHz or compatible	About 1 (5~100 ms)	About 0.2 (25~500 ms)	No	64 KB	About 512 KB

Note: I-8x37/W-8x37 has phased out. Please select compatible iP-8x47/WP-8x47.
W-8x47 will be phased out by the end of Feb. 2009.

Performance Comparison Table 2

PACs	μPAC			iPAC			WinCon	WinPAC
	I-7188 XG	I-7188 EG	μPAC-7186E G	I-8417/ I-8817	I-8x37/ I-8x37 -80 *1	iP-8447 iP-8847 *2	W-8x47 W-8x37 *1	WP-8147 WP-8447 WP-8847 *2
Support Ethernet I/O (I-8KE4-MTCP I-8KE8-MTCP)	NO			NO			Yes	
Send E-mail (file attached)	NO		Yes *3	NO		Yes	Yes	
Max. amount for linking I-7K/ 87K Remote I/O module (Only 1 port)	64						255 (COM3)	255 (COM2, 3)
	(COM2, 3)		(COM3, 4)		(COM 2, 3, 4)			
Modbus Master Function Block Max. amount	64 (total)		128 (total)		64 (total)		128 (total)	
Available Modbus Master COM Port (Max. mount) *4	(2 ports)						(10 ports)	
	COM 2, 3	COM 1, 2, 3		COM 1, 3, 4, 5		COM 1~5	COM 2, 3, 5~14	COM 1~14
Available Modbus Slave COM Port (Max. mount) *4	(2 ports)						(5 ports)	
	COM1 or 2/3			COM 1, 2	COM 1, 3	COM 1 or 2/3	COM 2 or 3, 5~8	COM 1, 2/3, 4~8
Modbus TCP/IP Connections	0	4	6	0	4	6	32 *5	
Modbus Address Range	1~4095			1~4095			1~8191	
Data Exchange	Fbus	Fbus, Ebus		Fbus	Fbus, Ebus		Ebus	
Support FRnet I/O	No			No		Yes *6	Yes *6	
Support CAN/CANopen	No		Yes *7	No		Yes *7	Yes *7	
Support VW Sensor	No			Yes			Yes	
Support Redundant Ethernet Port	No			No		Yes *8	Yes *8	
Support Mbus24r & mbus24r1 Function Block	No		Yes	No		Yes	Yes	
Support Mbus_xr & Mbus_xr1	No			No			Yes *9	
Support New Redundant System	No			No			Yes *10	

Annotations:

- *1. I-8x37/I-8x37-80 represents the products of I-8437/8837/8437-80/8837-80.
W-8x47 represents the products of W-8347/W-8747.
W-8x37 represents the products of W-8337/W-8737.
- *2. iP-8447/iP-8847 will be abbreviated as iP-8x47.
WP-8147/WP-8447/WP-8847 will be abbreviated as WP-8x47.
- *3. μ PAC-7186EG has to use an extra X607/608 battery backup SRAM expansion card for sending E-mail with an attached file, or it can only send E-mail without attached file.
- *4. I-8000's COM5~20 & W-8x47/ 8x37's COM5~14 resides at the I-8112/8114/8142/8144/ 8142i expansion modules ;

iP-8x47's COM5~20 resides at the I-8112iW/ 14W/ 14iW/ 42iW/ 44iW expansion modules;

WP-8x47's COM5~14 resides at the I-8112iW/ 14W/ 14iW/ 42iW/ 44iW expansion modules;

I-7188/ μ PAC-7186's COM3 ~ 8 resides at the X5xx X-board expansion boards.
- *5. The W-8xx7 with driver version 4.02 or older version only supports 8 Modbus TCP/IP connections, while supports up to 32 Modbus TCP/IP connections since the version 4.03.

If the controller is W-8347/8747 (two Ethernet ports), its OS image must update to the version released on July, 1, 2008 to ensure the network communications is correct.

Please refer to www.icpdas.com > [FAQ](#) > [Software](#) > [ISaGRAF](#) > 095 for more information.
- *6. iP-8x47 support Max. **4** pcs. of I-8172W (Max ch. 1024 D/I and 1024 D/O).
W-8x47/8x37 support Max. **7** pcs. of I-8172W (Max ch.1792 D/I and 1792 D/O).
WP-8x47 support Max. **8** pcs. of I-8172W (Max ch.2048 D/I and 2048 D/O).
- *7. μ PAC-7186EG, iP-8x47, WP-8x47 and W-8xx7 supports the I-7530 (RS-232 to CAN converter) to connect to other CAN/CANopen devices.
- *8. If the cable of one Ethernet port is broken or damaged, the PC/HMI can communicate with the other Ethernet port by Modbus TCP/IP protocol.
- *9. The Mbus_xr and Mbus_xr1 can read max. 120 words or 60 long integers or 60 real values. Please refer to www.icpdas.com > [FAQ](#) > [Software](#) > [ISaGRAF](#) > FAQ-101 for more information.
- *10. Only the WP-8x47 and W-8x47 support new redundant system, the W-8x37 doesn't support it.