



Advantech Automation Panel

Next Generation of HMI -
True Flat Touch and Intelligent Keys



product
design award

2013



- Introduction
- Features & Functions
- Intelligent Software
- Selection Guide



ADVANTECH

Enabling an Intelligent Planet

www.isotron.eu

Selection Guide



Model		TPC-1581WP/1881WP	TPC-1840WP/2140WP	SPC-1840WP/2140WP	TPC-1251T/1551T	FPM-6211W	FPM-7151W/7181W/7211W
Category		Touch Panel Computer		Stationary Panel Computer	Touch Panel Computer	Industrial Monitor	Industrial Monitor
Aspect ratio		16:9			4:3	16:9	
CPU		TPC-1581WP : Intel® 4 th Gen. Core™ i3-4010U 1.7GHz TPC-1881WP : Intel® 4 th Gen. Core™ i7-4650U 1.7GHz / Intel® 4 th Gen. Core™ i3-4010U 1.7GHz	AMD® G-series T56E Processor 1.65G	AMD® G-series T56N Processor 1.6G	Intel® Atom™ E3827 1.75 GHz Processor	-	
Memory		TPC-1581WP : 4GB DDR3L 1600MHz SO-DIMM SDRAM TPC-1881WP : 4GB / 8GB DDR3L 1600MHz SO-DIMM SDRAM	4GB SO-DIMM DDR3	4GB SO-DIMM DDR3	4GB (8GB optional) DDR3L 1600MHz SO-DIMM SDRAM	-	
Display	Display Type	WXGA TFT LED LCD	TPC-1840WP : WXGA TFT LED LCD TPC-2140WP : Full HD TFT LED LCD	SPC-1840WP : WXGA TFT LED LCD SPC-2140WP : Full HD TFT LED LCD	XGA TFT LED LCD	Full HD TFT LED LCD	FPM-7151W / 7181W : WXGA TFT LED LCD FPM-7211W : Full HD TFT LED LCD
	Display Size	TPC-1581WP : 15.6" TPC-1881WP : 18.5"	TPC-1840WP : 18.5" TPC-2140WP : 21.5"	SPC-1840WP : 18.5" SPC-2140WP : 21.5"	TPC-1251T : 12.1" TPC-1551T : 15"	21.5"	FPM-7151W : 15.6" FPM-7181W : 18.5" FPM-7211W : 21.5"
	Max. Resolution	TPC-1581WP : 1366 x 768 TPC-1881WP : 1367 x 768	TPC-1840WP : 1366 x 768 TPC-2140WP : 1920 x 1080	SPC-1840WP : 1366 x 768 SPC-2140WP : 1920 x 1080	1024 x 768	1920 x 1080	FPM-7151W / 7181W : 1366 x 768 FPM-7211W : 1920 x 1080
	Max. Colors	16.7M			16.2M	16.7M	
	Luminance cd/m²	300 nits			TPC-1251T : 600 nits TPC-1551T : 400 nits	250 nits	300 nits
	Viewing Angle (H/V°)	170/160	TPC-1840WP : 170/160 TPC-2140WP : 178/178	SPC-1840WP : 170/160 SPC-2140WP : 178/178	160/140	170/160	FPM-7151W / 7181W :170/160 FPM-7211W : 178/178
	Backlight MTBF(hrs)	50,000 hrs					
Touchscreen		Projected capacitive touch			5-wire Resistive	Projected capacitive touch	Projected capacitive touch
Network (LAN)		10/100/1000 Base-T x 2		10/100/1000 Base-T x 2, M12 connector	10/100/1000 Base-T x 2	-	-
Video Port			HDMI	-		HDMI	VGA & DVI / HDMI
I/O Ports		RS-232/422/485 x 1, RS-232 x 1 USB 3.0 x 2, HDMI 1.4 x 1 Audio Line out x 1, USB 2.0 x 1 (optional) Audio MIC x 1 (optional)	RS-232 x 3, RS-422/485 x 1 USB 2.0 (Host) x 2, Mic in x 1 Line out x 1	RS-232 x 1, M12 connector USB 2.0 x 1, M12 connector 24V _{DC} connector, M12 connector	RS-232 x 1, RS-232/422/485 x 1 USB 3.0 x 1 USB 2.0 x 1	USB Interface for touch screen	RS-232 and USB interface for touch screen
HDD (Optional)		2.5" SATA HDD				-	
Intelligent Keys		Yes			-	Yes	-
CompactFlash Slots		CFast slot x 1		-	CFast slot x 1	-	
Expansion Slots		Full-size Mini PCI-E (Support iDoor)	Full-size Mini PCI-E x 1		Full-size Mini PCI-E (Support iDoor with expansion kit-TPC-1251T-EHKE)	-	
DC Power Input (Voltage)		24V _{DC} ± 20%					
Ingress Protection		Front panel: IP66		All around IP66	Front panel IP66		
Enclosure		Front bezel : Die-cast Aluminum alloy Back housing : PC/ABS Resin		Front bezel : Die-cast aluminum alloy Back housing : Die-cast aluminum alloy	-	Die-cast Aluminum alloy	Front panel : Die-cast magnesium alloy Rear cover : SECC
Mounting		Panel mount		Desktop, wall, VESA mount	Panel, wall mount	VESA mount	Desktop, wall, VESA Mount
Operating Temperature		0 ~ 55°C (32 ~ 131°F)		0 ~ 50°C (32 ~ 122°F)	-20 ~ 60°C (-4 ~ 140°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 55°C (32 ~ 131°F)
Storage Temperature		-20 ~ 60°C (-4 ~ 140°F)			-30 ~ 70°C (-22 ~158°F)	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)
Dimensions		TPC-1581WP : 419.7 x 269 x 56.7 mm (16.52" x 10.59" x 2.23") TPC-1881WP : 488 x 309 x 56.7 mm (19.21" x 12.17" x 2.23")	TPC-1840WP : 488 x 309 x 56.7 mm (19.21" x 12.17" x 2.23") TPC-2140WP : 558.4 x 349.8 x 56.7 mm (21.98" x 13.77" x 2.23")	SPC-1840WP : 488 x 309 x 65 mm (19.21" x 12.17" x 2.56") SPC-2140WP : 558.4 x 349.8 x 56.7 mm (21.98" x 13.77" x 2.23")	TPC-1251T : 311.80 x 238 x 57.2 mm (12.28" x 9.37" x 2.25") TPC-1551T : 383.2 x 307.3 x 61.1 mm (15.09" x 12.10" x 2.41")	519.6 x 314.3 x 26.5 mm (20.46" x 12.37" x 1.04")	FPM-7151W : 419.7 x 269 x 47.7 mm (16.52" x 10.59" x 1.88") FPM-7181W : 488 x 309 x 47.7 mm (19.21" x 12.17" x 1.88") FPM-7211W : 558.4 x 349.8 x 47.7 mm (21.98" x 13.77" x 1.88")
Weight		TPC-1581WP : 6 kg (13.22 lbs) TPC-1881WP : 7 kg (15.44 lbs)	TPC-1840WP : 7 kg (15.44 lbs) TPC-2140WP : 8 kg (17.64 lbs)	SPC-1840WP : 8 kg (17.64 lbs) SPC-2140WP : 9 kg (19.8 lbs)	TPC-1251T : 2.5 kg (5.51 lbs) TPC-1551T : 3.9 kg (8.59 lbs)	4.5 kg (9.92 lbs)	FPM-7151W : 5 kg (11 lbs) FPM-7181W : 6 kg (13.2 lbs) FPM-7211W : 8 kg (17.6 lbs)
Certification		BSMI, CCC, CE, FCC Class A, UL					
Operating System		Microsoft® Windows XP/7/WE8 Industry/WES7/Linux			Microsoft® Windows WES7 32bit/64bit /WE8S 64bit / Windows 7 / 8 32bit/64bit / Linux Kernel 3.x	Microsoft® XP, Vista,7,WE8 Industry, Linux, CE	Microsoft® XP, Vista,7,8, XPe, CE and Linux



Advantech Automation Panels

Next Generation of HMI- True Flat Touch and iKey



16:9 Wide Screen & Multi-touch

16:9 widescreen adds 40% viewing area to display more information for easier management than a traditional 4:3 display. By integrating multi-touch functionality, factory workers can increase operational safety with two-point key confirmation.



Magnesium-alloy Front

With a magnesium alloy front, the thin client panel computers have a reduced weight of 35% compared to aluminum alloy models with 18.5" and 21.5" sizes.



IP66 True Flat Touch Screen

Protected by IP66 certification with true flat PCT and resistive touch, thin-client panel computers support a 7H hardness anti-scratch surface to prevent accidental scratches caused by tools such as screwdrivers.



Intelligent Keys & Customized UI

Through touch-like intelligent-key support, thin-client panel computers provide an intuitive GUI & usability to simplify operating steps to save time. Customers can easily customize their own UI by using the updated SDK and API released on the official website.



Remote Management by Built-in Embedded Controller

With a built-in embedded controller combined with cloud computing technology, the thin-client panel computers provide a more efficient solution for remote management to reduce the TCO of production.



Multiple I/Os with M12 Connector

The thin-client panel computers provide a wide variety of I/O ports including: COM-port, USB, 1000Base-T LAN, HDMI, and Audio ports with IP rating M12 connector.



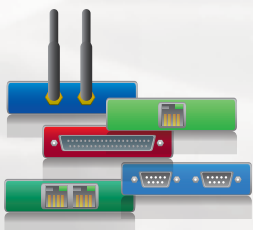
More Powerful Graphical Processors

With a more powerful graphics processor, the thin-client panel computers offer advanced graphical performance for more efficiency when handling complicated processes.

Advantech's new range of star products include several new models in the Touch Panel Computer(TPC), Stationary Panel Computer(SPC) and Industrial Monitor(FPM) range of devices, all of which come with true flat style by 16:9 multi-touch displays or 4:3 5W resistive touch, high-performance dual-core processors and IP66 certified front panels making them more elegant and fit for smart factory. Furthermore, Advantech Panels have combined cloud computing technology to make the solutions more efficient, reduce the cost of production and provide factory workers with more intuitive management of the production line.



ikoy



Support iDoor Technology

With Advantech iDoor Technology, customers can add system functions through the variety of standardized modular I/Os. Modules for iDoor systems include: Fieldbus protocol; memory expansion and storage; digital and analog I/O; WAN, MAN and LAN communications with Wi-fi, GPS, GPRS and LTE.



Supports Standard VESA Arm

With support for a standard 100x100mm VESA Arm, the thin-client panel computers are suitable for various applications such as automotive production.



Easy-Installation

With a special snap design, the thin-client panel computers can be easily installed by one person thereby speeding up the installation process.



Long Distance Display

By using the next generation digital video interface, the thin-client panel computers provide a long distance interface for video and USB signals.

Intelligent Software

Advantech WebAccess



Advantech WebAccess is a 100% web browser-based software package for HMI and SCADA with private cloud software architecture. All the features found in conventional HMI and SCADA software including Animated Graphics Displays, Real-time Data, Control, Trends, Alarms and Logs, are available in a standard web browser. WebAccess is built around the latest internet technologies.



SUSIAccess-Remote Device Management



SUSIAccess is an innovative remote management and cloud-based software preloaded in all Advantech embedded solutions, allowing the efficient and centralized remote monitoring and management of embedded devices in real-time, device health status, system configuration, system protection, and recovery & backup. SUSIAccess targets the needs of creating a more intelligent and interconnected embedded computing solution.

Panel Express



PanelExpress is a Windows based HMI runtime software, it enables you to utilize the resources of a PC, such as computation power, multimedia and bigger screen to realize a high-end sophisticated HMI.



Data collection, alarm monitoring, recipe handling, and history of logging



No limitation on the internal I/O points



Supports over 450 PLC communication protocols



Over 50 kinds of screen objects



Supports 16 communication links

Advantech Innovative Design Concept- Simple, Flexible, Reliable

As a leading provider of Industrial PC, Advantech devoted to innovation product/service development. To be the pioneer in intelligent automation technology, the i-concept represents the intelligent, integrated and intuitive design which covers the innovation of service model, user behavior and cutting-edge technology that opens a new era of industrial automation.



An integrated intelligent key brings simplified intuitive operation for configuring your automation panel. With a flexible software design, customized functions are easier to carry out.



A standardized modular Interface which offers flexible expansion to increase the number of applications and expand system functions through the variety of standardized modular I/Os.



A Reliable Long Distance Transmission Technology which transfers video signals and touch control over a single Ethernet cable which overcomes interference in harsh environments not only for data connections, but also for a cost effective multiple display solution.

Regional Service & Customization Centers

China

Kunshan
86-512-5777-5666

Taiwan

Taipei
886-2-2792-7818

Netherlands

Eindhoven
31-40-267-7000

Poland

Warsaw
48-22-33-23-740 / 41

USA/ Canada

Milpitas, CA
1-408-519-3898

Worldwide Offices

Greater China

China

Toll Free	800-810-0345
Beijing	86-10-6298-4346
Shanghai	86-21-3632-1616
Shenzhen	86-755-8212-4222
Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118

Taiwan

Toll Free	0800-777-111
Neihu	886-2-2792-7818
Xindian	886-2-2218-4567
Taichung	886-4-2378-6250
Kaohsiung	886-7-229-3600

Asia Pacific

Japan

Toll Free	0800-500-1055
Tokyo	81-3-6802-1021
Osaka	81-6-6267-1887

Korea

Toll Free	080-363-9494
Seoul	82-2-3663-9494

Singapore

Singapore	65-6442-1000
-----------	--------------

Malaysia

Toll Free	1800-88-1809
Kuala Lumpur	60-3-7725-4188
Penang	60-4-537-9188

Indonesia

Jakarta	62-21-769-0525
---------	----------------

Thailand

Bangkok	66-2-248-3140
---------	---------------

India

Toll Free	1-800-425-5070
Pune	91-20-39482075
Bangalore	91-80-2545-0206

Australia

Toll Free	1300-308-531
Melbourne	61-3-9797-0100
Sydney	61-2-9476-9300

Europe

Toll Free	00800-2426-8080
-----------	-----------------

Germany

Munich	49-89-12599-0
Hilden / D'dorf	49-2103-97-885-0

France

Paris	33-1-4119-4666
-------	----------------

Italy

Milano	39-02-9544-961
--------	----------------

Benelux & Nordics

Breda	31-76-5233-100
-------	----------------

UK

Reading	44-0118-929-4540
---------	------------------

Poland

Warsaw	48-22-33-23-740 / 41
--------	----------------------

Russia

Toll Free	8-800-550-01-50
Moscow	7-495-232-1692

Americas

North America

Toll Free	1-888-576-9668
Cincinnati	1-513-742-8895
Milpitas	1-408-519-3898
Irvine	1-949-420-2500

Brazil

Toll Free	0800-770-5355
Saude-São Paulo	55-11-5592-5355

Mexico

Toll Free	1-800-467-2415
Mexico City	52-55-6275-2777

ADVANTECH

Enabling an Intelligent Planet

<http://www.advantech.com>

Please verify specifications before quoting. This guide is intended for reference purposes only. All product specifications are subject to change without notice.

No part of this publication may be reproduced in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission of the publisher.

All brand and product names are trademarks or registered trademarks of their respective companies.

© Advantech Co., Ltd. 2014

8600000150