JSB-4750	USB-4751	USB-4751L	USB-4761	USB-4622	USB-4671

USB 1.1/2.0	USB 1.1/2.0	USB 1.1/2.0	USB 1.1/2.0	USB 2.0	USB 2.0
Digital I/O	Digital I/O	Digital I/O	DI/Relay	* 5 downstream	GPIB
	_			USB 2.0 port	* High-performance
				* Compatible with	USB Module with a
	-	-		USB 2.0/1.1/1.0	GPIB interface.
-	-	-	-	*480Mbps high-	* Fully compatible
				speed data	with IEEE 488.1
				transfer	and 488.2
-	-	-	-	* LED indicator	standards.
-	-	-	-	* Suitable for DIN-	* Supports
	-			rail mounting	controller/slave
-	-		-	* Lockable USB	driver control mode
-	-		-	cable	* Perform basic the
			-		IEEE 488 talker,
16/16	48(mixed)	24(mixed)	8/8		listener and
5~50V	5V TTL	5V TTL	5~30V		controller functions
5~40V	5V TTL	5V TTL	250Vac@3A		required by IEEE
100mA/ch.	Sink:8mA@4V	Sink:8mA@4V	24Vdc@1A		488.2.
	Source:4mA@2.4V	Source:4mA@2.4V			* Connect up to 15

5V TTL

32-bit

5V TTL

32-bit

8MHz

8MHz

2 (PWM)

5V TTL

32-bit

8MHz 2 (PWM)

8MHz

# Regional Service & Customization Centers

 China
 Taiwan
 Netherlands
 Poland
 USA

 Kunshan 86-512-5777-5666
 Taipei 886-2-2218-4567
 Eindhoven 31-40-267-7000
 Warsaw 48-22-33-23-730
 Milpitas, CA 1-877-451-6868

#### **Worldwide Offices**

China		Asia Pacifi	c	Europe			Americas	
eijing hanghai Chengdu	86-10-6298-4346 86-21-6282-8959 86-28-8545-0198	Malaysia	65-6442-1000	<b>Germany</b> Düsseldorf	49-211-9	7477-310	USA Cincinnati, OH Milpitas, CA	1-513-742-8895 1-408-519-3891
long Kong	86-755-8212-4222 852-2720-5118	Penang	60-4-397-3788 60-4-397-4188	France Grenoble	33-4-767	0-4700	Brazil São Paulo	55-11-5592-5355
aiwan aipei aichung	886-2-2218-4567 883-4-2378-6250	<b>Japan</b> Tokyo Osaka	81-3-5212-5789 81-6-6267-1887	<b>Italy</b> Milano	39-02-95	44-961		
	886-7-229-3600	<b>Korea</b> Seoul	82-2-3663-0405	Benelux & Nordics Roosendaal 31-165-5		50-505		
		Thailand Bangkok	66-2-248-3140	UK Berkshire	44-1344-	989-500		
		India Chennai	91-44-4230-3878					
		Australia Sydney Melbourne	61-2-9482-2999 61-3-9797-0100					
<ul><li>Berksh</li></ul>	noven Warsav Dusse Paris Dusse Munich Milan Arezzo	Moscow Bangalo	Shanghai— <b>Kunshan</b> Bangalore	ing Seoul To Os: Tai Hong Kong Shenzhen Dongguan	aka <b>pei</b>		go	Cincinnati  Sao Paulo
						Regional L	ogistic Center	•
						Branch Of	fice	



GPIB instruments.

www.advantech.com/eA
Please verify specifications before quoting. This guide is intended for reference purposes only.

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**e**Automation



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# USB Data Acquisition Product Selection Guide





Bus		USB 2.0	USB 2.0	USB 2.0
Features		Multifunction	Multifunction	Temperature
Analog	Resolution	12-bit	16-bit	16-bit
Input	Channels	16S.E./8Diff.	16S.E./8Diff.	8Diff.
	Sampling Rate	150kS/s	200kS/s	10S/s
· ·	Input Voltage	±10,5,2.5	±10,5,2.5	J,K,T,E,R,S,B types
		1.25,0.625V	1.25,0.625V	0~2500, 1000,
			0~10,5,2.5,0.125V	500, 100, 50, 15mV
	Input Current			0~20,4~20mA
Analog	Resolution	12-bit	16-bit	
Output	Channels	2	2	
	Isolation			
	Output range	±10,5V;0~5,10V	±10,5V;0~5,10V	
	Throughput	Static update	Static update	
Digital I/O	Channels	8/8	8/8	8/8
	Input Voltage	3.3/5V TTL	3.3/5V TTL	5~30V
	Output Voltage	3.3V TTL	3.3V TTL	5~30V
	Output Current	Sink:4mA	Sink:2mA	200mA/ch
		Source:4mA	Source:2mA	1.1A/total
Counter	Channel	1	1	
	Input Voltage	3.3/5V TTL	3.3/5V TTL	
	Resolution	32-bit	32-bit	
<u>.</u>	Time Base	1KHz	1KHz	
Pulse Output	Channel	1	1	
	Output Voltage	3.3V TTL	3.3V TTL	
	Output Frequency	1KHz	1KHz	



# Think outside the box

The idea of Advantech USB DAQ series is to separate computing platform and data acquisition interface into two parts. In general, technologies of data acquisition and control interface don't change as fast as technologies of computing platforms, which means the life cycle of data acquisition devices are quite longer than platforms'. By using the add-on Advantech USB DAQ series, users can easily upgrade their platforms to the most upto-date technologies, or accomplish the daily maintenance work, while leaving the data acquisition devices untouched, allowing them to operate as stable and reliable as usual.











With Controller Applications



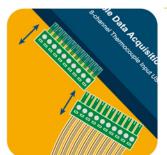
#### **Lockable USB Cable**

Reliable Connections are critical to automation control and online production. While the standard USB cable is designed for easy plugging and removing, Advantech invests R&D efforts to provide screw-type USB cables which prevent the cable from being unplugged accidentally.



# **DIN-rail Mounting**

**DIN-rail** is widely used for mounting power supplies, circuit breakers and other industrial control equipment installed within a rack. All Advantech USB Data Acquisition modules come with DIN-rail brackets, making them eligible for standardized 35mm wide DIN-rail mounting.



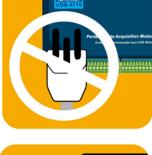
# **Detachable Screw Terminal**

Saving Money & Space are the main benefits of using detachable screw terminals on Advantech USB Data Acquisition modules. Hundreds of dollars can be saved from not having to buy additional cables and/or wiring boards, while extra space can be spared as well.



# **On-Module Pin Assignment Index**

An Instinctive Sense of Wiring simplifies the users' maintenance efforts and reduces incorrect connections that may damage the device itself or the linking equipment. All of the pin indexes are pre-printed on the casing of Advanech's USB Data Acquisition modules. providing users a more direct way to operate.



# **Bus-Powered**

No Need for External Power allows high mobility for Advantech's USB Data Acquisition modules. Advantech's USB Data Acquisition modules can directly derive power from system USB ports, freeing you from the inconvenience of being unable to find a power source indoors or outdoors.



# Plug & Play/ Hot Swap

Set Up Your Devices Within Seconds and you're ready to go. It takes just a few steps to install Advantech's USB Data Acquisition modules without dismantling or shutting down your system. Up to 16 devices can be applied to your PC.



# 480Mbps High Speed Data Transfer

**Advanced Data Acquisition Functions** can be accomplished. Up to 200kS/s sampling rate, 16-bit resolution, 16-ch analog input, 48-ch Digital I/O specifications, as well as interrupt, event counter, and pulse width modulation (PWM) functions are available on Advantech's USB Data Acquisition modules.



# Palm-Sized

Compact Yet Highly Integrated. Advantech's USB Data Acquisition modules are small enough to make them a great sidekick for notebooks, while still providing the same functionality as full-sized modules. Analog I/O. Digital I/O and Counter functions can be all enclosed into a single module. They are the perfect companions when you travel to exhibitions or a business show.

# Versatile Software/ Utility Support

### **ActiveDAQ Pro with Graphic User Interface (GUI)**

ActiveDAQ Pro is a collection of ActiveX controls for performing I/O operations within a compatible ActiveX control container, such as Visual Basic, Visual C, Borland C++ Builder, and Delphi. You can easily perform I/O operations without a lot of programming or property setting adjustments.

Meanwhile, the graphic user interface (GUI) enables convenient and quick building of graph display modules for data acquisition to supervise the status changes of objects. ActiveDAQ Pro GUI control collection also helps users easily develop prototype vision applications in an interactive environment without programming. (Ordering part number: PCLS-ADPSTD)

# WaveScan 2.0 Free



Ready-to-use utility that performs real-time wave display, data logging functions with graphic user interface. Easy installation and operation make you get your work done within minutes.

# Windows 2000/XP/32-bit Vista DLL Driver



Performing versatile I/O operations through properties, methods and events in programs developed with Microsoft Visual Basic, Microsoft Visual C++, Delphi, Borland C++ Builder and other programming Windows Vista languages and development environments.

#### Windows CE Driver



Supporting Windows CE platform that features as a component-based, embedded and real-time OS with minimal system requirement.

#### ➤ LabVIEW Driver



The LabVIEW driver forms an interface between Advantech USB Data Acquisition Series DLL drivers and LabVIEW software. It provides a VI (virtual instrument) in the LabVIEW package, which enables other applications to be used in conjunction with the USB Data Acquisition Series hardware.