



## Digital I/O boards, relay boards



	Digital input, 24 V		Digital I/O, 24 V			Digital output, 24 V		Digital I/O, TTL	Relay board	
	APCI-1016	APCI-1032 APCI-1032-5	APCI-1564 APCI-1564-5	APCI-1564-3,3	APCI-1500 CPCI-1500	APCI-1516	APCI-2016	APCI-2032 APCI-2032-5	APCI-1648 APCI-1696	APCI-2200
<b>PCI bus 32-bit</b>	5 V	5 V	5 V	3.3 V	PCI 5 V / CPCI	5 V	5 V	5 V	3.3 V / 5 V	5 V
<b>Filters and protection circuitry</b>	✓	✓	✓		✓	✓	✓	✓	✓	✓
<b>Input channels</b>	16	32	32		16	8				
<b>Optical isolation 1000 V</b>	✓	✓	✓		✓	✓				
<b>Interruptible input channels</b>		16	16		14					
<b>Nominal voltage(V) DC (V)</b>	24 (19-30)	24 (19-26) 5 V	24 (19-30) 5 V		24 (19-30)	24 (19-30)				
<b>Input current at 24 VDC</b>	6 mA	5 mA	5 mA		6 mA	6 mA				
<b>Output channels (high side drivers 24 V)</b>			32		16	8	16	32	48/96 TTL	
<b>Relays</b>										8/16 relays
<b>Optical isolation 1000 V</b>			✓		✓	✓	✓	✓		✓
<b>Nominal voltage(V)</b>			24 DC (10-36)		24 DC (10-36)	24 DC (10-36)	24 DC (10-36)	24 DC (10-36)	TTL	60 DC 48 AC
<b>Output current (A) for one channel</b>			0.5 <sup>(1)</sup>		0.5 <sup>(1)</sup>	0.5 <sup>(1)</sup>	0.5 <sup>(2)</sup>	0.5 <sup>(2)</sup>	12 LS TTL loads	1
<b>Functions</b>										
<b>Watchdog (depth)</b>			✓ 8-bit		✓ 16-bit	✓ 8-bit	✓ 8-bit	✓ 8-bit		✓ 8-bit
<b>Timer / counter (depth)</b>			1/3 32-bit		3/ 16-bit					
<b>Page</b>	16	16	17		APCI-1500: 17 CPCI-1500: 31	16	18	18	18	19
<b>Software</b>	Drivers for Windows XP/2000/NT/98, Linux; LabVIEW™, LabWindows CVI™ + Samples. Current driver list on the web : <a href="http://www.addi-data.com">www.addi-data.com</a>									


(1) Limited to 3 A for all input channels, self-resetting fuse against short circuits  
 (2) Limited to 2 x 3 A, for all output channels, self-resetting fuse against short circuits

### Counter


	<b>Multifunction counter boards</b>
	<b>APCI-1710 / CPCI-1710</b>
<b>Bus 32-bit</b>	PCI 5 V / CompactPCI 5 V
<b>Filters/Protection circuitry</b>	✓
<b>Isolation 1000 V</b>	✓
<b>Number of function modules</b>	4 function modules with numerous functions, quickly and easily programmable: Each of the 4 function modules is programmed with one function. You can program 4 times the same function or freely combine 4 different functions.
<b>Available functions for each module:</b>	<ul style="list-style-type: none"> <li>1 x 32-bit incremental encoder acquisition</li> <li>2 x 16-bit incremental encoder acquisition</li> <li>3 x acquisition of absolute value encoder/SSI</li> <li>3 x counter/timer</li> <li>1 x chronos/TOR for frequency measurement</li> <li>4 x pulse width measurement</li> <li>1 x chronos for pulse width measurement</li> <li>1 x chronos for period duration measurement</li> <li>2 x TOR for velocity measurement</li> <li>8 x digital I/O, 24 V, TTL, RS422</li> <li>2 x PWM (Pulse Width Modulation)</li> <li>24x TTL I/O only possible on one module</li> <li>1 x SSH-Monitor</li> <li>1 x BiSS-Master</li> <li>2 x ETM (Edge Time Measurement)</li> <li>Other functions on request</li> </ul>
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**NEW**

### Watchdog

	<b>Watchdog</b>
	<b>APCI-035</b>
<b>Bus 32-bit</b>	5 V/3.3 V
<b>Isolation 500 V</b>	✓
<b>Watchdog/timer</b>	4
<b>Diagnostic</b>	<ul style="list-style-type: none"> <li>• Status of the 4 watchdogs readable</li> <li>• Watchdog 1 can switch 2 relays</li> <li>• 1 digital input as watchdog trigger</li> <li>• timer gate</li> </ul>
<b>Time base</b>	µs, ms, s, min
<b>Relays</b>	2 with change-over contacts
<b>Digital input, 24 V</b>	1 trigger channel / gate input
<b>Alarm levels</b>	2
<b>Real range of application</b>	0-60 °C
<b>Applications</b>	<ul style="list-style-type: none"> <li>• Supervision of PC-controlled processes</li> <li>• Time measurement</li> <li>• Temperature monitoring</li> <li>• Timer-controlled software applications</li> </ul>
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### Motion Control

	<b>Motion Control</b>
	<b>APCI-8001</b>
<b>Bus 32/64-bit</b>	PCI 3.3 V or 5 V/CompactPCI 5 V
<b>Optical isolation</b>	✓
<b>Function</b>	Motion control for 3 servo or stepping motors, can be extended to up to 8 axes
<b>Interpolation</b>	2D .. 3D linear, 2D circular, 3D circular, 3D helical, spline, asynchronous and synchronous interpolation with secondary axes
<b>Processor</b>	150 MHz
<b>RAM</b>	16 MB
<b>Digital I/O</b>	16 inputs, 24 V, optically isolated 8 outputs, 24 V, optically isolated
<b>Analog I/O</b>	optional
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	<b>NEW</b>
	<b>Digital I/O board for PC/104-Plus</b>
	<b>PC104-PLUS1500</b>
<b>Bus</b>	PC104-Plus
<b>Functions</b>	<ul style="list-style-type: none"> <li>• 16 digital inputs, 24 V, incl. 2 interruptible inputs, 16 digital outputs, 24 V, 150 mA/channel</li> <li>• Optical isolation 1000 V</li> <li>• Input and output filter</li> <li>• Watchdog, timer</li> <li>• Resets the outputs to "0" at Power-On</li> </ul>
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