



# SPECTRUM

SYSTEMENTWICKLUNG MICROELECTRONIC GMBH

## PC-Card/ExpressCard - Docking Station

- Mobile Instrumentation for Notebooks
- Available for 1 up to 13 PCI Cards
- Available for 1 up to 7 PCI Express Cards
- PCCard/ExpressCard connector
- PCI/PCI-Express adaptor card as option
- Capable of hot-plugging
- Runs with Windows XP/Vista/Windows 7 (either 32 bit and 64 bit)
- PCI Express Docking Stations run with Linux 32 bit and 64 bit
- Software transparent



### General Information

The PCI and PCI Express docking stations allow to use all Spectrum PCI boards and PCI Express boards totally hardware transparent with a standard notebook. The high-end instrumentation boards are placed in an external docking station that is connected to the notebook via an integrated PC-Card or ExpressCard interface. The docking station is a good alternative to complete portable PC systems at reasonable costs especially if a notebook is already existing. The docking station is also a good solution to use the instrumentation system with different notebooks.



Programming of the Spectrum boards is done with the existing drivers. After the installation of an additional driver for the docking station there is no extra step necessary for programming the boards. The connection is done totally hardware transparent.

Extra cooling fans are included in the docking station to keep the correct temperature.

### Compatibility

All Spectrum PCI boards and all Spectrum PCI Express boards work together with the docking stations. It is possible to use up to four PCI boards or 1 PCI Express board in the external box. The docking station works together with the Spectrum boards under Windows XP and Windows Vista.

### Technical Data

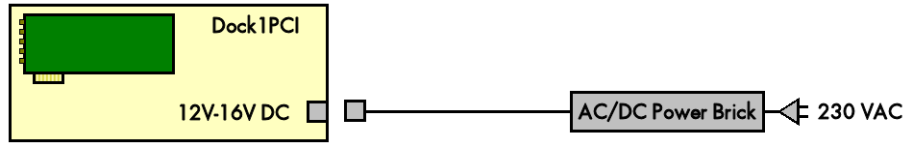
OS compatibility	Windows XP, Windows Vista, Windows 7 (32 bit and 64 bit). PCI Express Docking Stations run with Linux 32 bit and 64 bit	Cable	1 m connection cable included
MTBF	25.000 Hours	Operating Temperature	0° up to 50°

	Slots (full length)	Size	Weight	Cooling fan	Power supply (standard)	Power supply (option)
DOCK1PCI	1 PCI	355 mm x 180 mm x 45 mm	1.2 kgs	1	External 230 V AC/12 V DC	DC XLR4 or Cigarette Lighter
DOCK2PCI	2 PCI	385 mm x 254 mm x 64 mm	2.4 kgs	2	Internal 230 V AC	n.a.
DOCK4PCI	4 PCI	417 mm x 333 mm x 89 mm	4.1 kgs	2	Internal 230 V AC	n.a.
DOCK13PCI	13 PCI	483 mm x 450 mm x 178 mm	12.0 kgs	2	Internal 230 V AC	n.a.
DOCK1Exp	1 PCI Express	348 mm x 196 mm x 44 mm	2.0 kgs	3	Internal 230 V AC	n.a.
DOCK4Exp	4 PCI Express	483 mm x 450 mm x 89 mm	6.8 kgs	2	Internal 230 V AC	n.a.
DOCK7Exp	7 PCI Express	483 mm x 450 mm x 178 mm	12.0 kgs	2	Internal 230 V AC	n.a.

## **Dock1PCI Power Options**

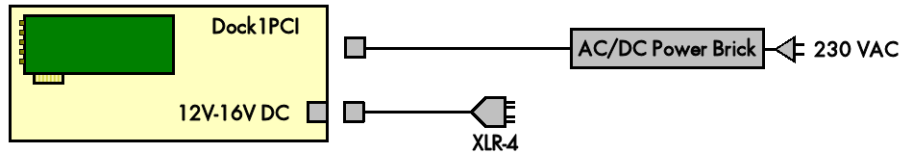
### **Standard Power Supply**

DC 12V to 16V power input using a 230 VAC external power brick.



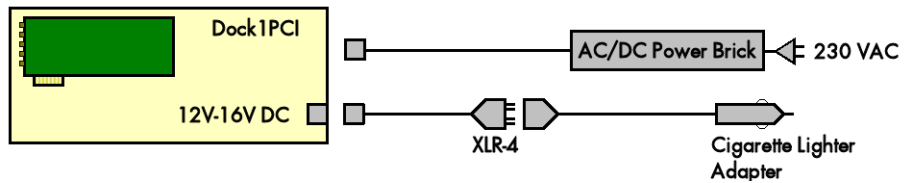
### **DC Option XLR4**

12V to 16V DC input on XLR4 connector as an extra option. 230 VAC power brick still included in delivery.



### **DC Option CAR**

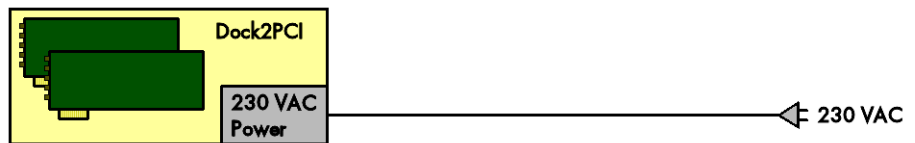
12 V Cigarette Lighter Adapter as used in cars. Contains option XLR4 and a XLR4 to Cigarette Lighter Adapter. 230 VAC power brick still included in delivery.



## **Dock2PCI Power Options**

### **Standard Power Supply**

Internal AC 230 VAC Power Supply.



## **Dock4PCI/Dock13PCI Power Options**

### **Standard Power Supply**

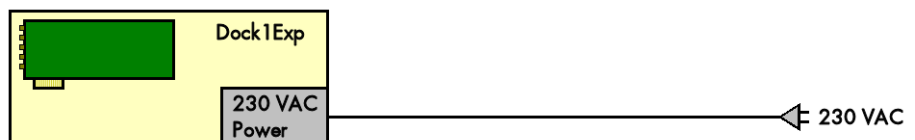
Internal AC 230 VAC Power Supply.



## **Dock1Exp/Dock4Exp/Dock7Exp Power Options**









### **Standard Power Supply**

Internal AC 230 VAC Power Supply.



## Bus Interface Options

Each docking station comes with one of the following bus interfaces. Please see the order information below for the different order numbers. It is possible to order additional separate bus interfaces to use one docking together with different systems. By ordering a docking station with ExpressCard together with a separate PCI Express host card it is per example possible to use the instrument together with a notebook as well as with a desktop system.

Interface		Order suffix	Suitable for	Technical Data	
PCCard		-Card	all PCI docking stations	Interface type PCI Transfer Speed PCI Busmaster PCI specification	PCCard/CardBus 32 Bit @ 33 MHz capable Revision 2.2
ExpressCard34		-E34	all PCI docking stations	Interface type PCI Transfer Speed PCI Busmaster PCI specification	ExpressCard 34mm 32 Bit @ 33 MHz capable Revision 2.2
ExpressCard54		-E54	all PCI docking stations	Interface type PCI Transfer Speed PCI Busmaster PCI specification	ExpressCard 54mm 32 Bit @ 33 MHz capable Revision 2.2
PCI 32 bit host		-PCI32	all PCI docking stations	Interface type PCI Transfer Speed PCI Busmaster PCI specification	PCI 32 bit ultra short length 32 Bit @ 33 MHz capable Revision 2.2
PCI Express x1 host		-PCIEx1	all PCI docking stations	Interface type PCI Transfer Speed PCI Busmaster PCI specification	PCI Express x1 slot 32 Bit @ 33 MHz capable Revision 2.2
ExpressCard34		-E34	all PCI Express docking stations	Interface type Express Transfer Speed Busmaster Express specification	ExpressCard 34mm x1 lane (2.5 GB/s) capable Revision 1.1
PCI Express x1 host		-PCIEx1	1 slot PCI Express docking stations	Interface type Express Transfer Speed Busmaster Express specification	PCI Express x1 slot x1 lane (2.5 GB/s) capable Revision 1.1
PCI Express x8 host		-PCIEx8	4 and 7 slot PCI Express docking stations	Interface type Express Transfer Speed Busmaster Express specification	PCI Express x8 slot x8 lane (20 GB/s) capable Revision 1.1

## Order information

### Versions

	PCCard	ExpressCard 54	ExpressCard 34	PCI HostCard	PCI Express Card
1 Slot PCI Version (2)	DOCK1PCI-Card	DOCK1PCI-E54	DOCK1PCI-E34	DOCK1PCI-PCI32	DOCK1PCI-PCIEx1
2 Slot PCI Version (2)	DOCK2PCI-Card	DOCK2PCI-E54	DOCK2PCI-E34	DOCK2PCI-PCI32	DOCK2PCI-PCIEx1
4 Slot PCI Version (2)	DOCK4PCI-Card	DOCK4PCI-E54	DOCK4PCI-E34	DOCK4PCI-PCI32	DOCK4PCI-PCIEx1
13 Slot PCI Version (2)	DOCK13PCI-Card	DOCK13PCI-E54	DOCK13PCI-E34	DOCK13PCI-PCI32	DOCK13PCI-PCIEx1
1 Slot PCI Express (2)	n.a.	n.a.	DOCK1Exp-E34	n.a.	DOCK1Exp-PCIEx1
4 Slot PCI Express (2)	n.a.	n.a.	DOCK4Exp-E34	n.a.	DOCK4Exp-PCIEx8
7 Slot PCI Express (2)	n.a.	n.a.	DOCK7Exp-E34	n.a.	DOCK7Exp-PCIEx8
Delivery Content	Delivery consists of the selected docking station together with the specified bus interface, power supply, 1m cable, documentation and drivers. The Spectrum instrument is mounted and calibrated inside the docking station.				

### Options

Order no.	
DOCK1PCI-CAR (2)	12 V Car adapter cable for DOCK1PCI (contains XLR4 adapter)
DOCK1PCI-XLR4 (2)	DC to XLR-4 male adapter for 1 Slot Docking Station

### Host cards

Order no.	
DOCKxPCI-PCI32 (2)	Additional 32 bit/33 MHz PCI host card for all PCI Docking Stations
DOCKxPCI-PCIEx (2)	Additional x1 PCI-Express host card for all PCI Docking Stations
DOCKxPCI-E34 (2)	Additional ExpressCard 34mm host card for all PCI Docking Stations
DOCKxPCI-E54 (2)	Additional ExpressCard 54mm host card for all PCI Docking Stations
DOCKxPCI-Card (2)	Additional PCCard host card for all PCI Docking Stations
DOCKxExp-PCIEx1 (2)	Additional x1 PCI-Express host card for 1 slot PCI Express Docking Stations
DOCKxExp-PCIEx8 (2)	Additional x1 PCI-Express host card for 4 and 7 slot PCI Express Docking Stations
DOCKxExp-E34 (2)	Additional ExpressCard 34mm host card for all PCI Express Docking Stations