

USB+POWER INTERCONNECT SYSTEM

OVERVIEW

The USB+Power interconnect system was developed by FCI to enable additional power to be delivered to peripheral devices connected using USB 2.0 cable links. When compared to a standard USB connector, the USB+Power connector interface includes four additional contacts for power delivery, each rated at 5A/contact, to supplement the connector's current-carrying capability.

For many devices, this eliminates the requirement for a separate power source reducing the number of cables required. For peripherals not requiring the additional current, the USB+Power receptacle will mate with a standard USB 'A' plug.

To ensure proper mating, USB+Power is individually keyed and color coded for 5V, 12V, and 24V.



FEATURES & BENEFITS

- Four additional contacts provide up to 5A/contact of additional current-carrying capacity eliminating the need for an external power supply in most peripheral device
- Receptacle mates with standard USB 'A' plug
- Keyed and color coded for different voltages
- Positive latching insures proper mating and retention
- Fully shielded providing USB 2.0 data performance
- Hot plugging capability

TARGET MARKETS/APPLICATIONS

- Data
- Consumer
- Datacom/Telecom
- PC
- Point of sale
- Hubs
- Speakers



TECHNICAL INFORMATION

MATERIALS

- Receptacles
 - Housing: High temperature thermoplastic UL94V-0 rated
 - Contacts: Copper alloy
 - Shell: Copper alloy
- Cables
 - Cable jacket: PVC
 - Contacts: Copper alloy
 - Data conductors: 28 AWG twisted pair
 - Power conductors: Non-twisted pair
 - Shield: Aluminized foil and 65% coverage tinned copper braid

ELECTRICAL PERFORMANCE

- Operating voltage: 12V/24V/24V DC
- Withstanding voltage: 750V AC min.
- Current rating
 - USB contacts: 1.5A/contact min.
 - Power contacts: 5.0A/contact min.

- Contact resistance: 30mΩ max.
- Signal impedance: 90Ω +/- 15%

MECHANICAL PERFORMANCE

- Meets USB 2.0 standard
- Durability: 1,500 cycles

SPECIFICATIONS

- USB 2.0 compliant
- Product specification: GS-12-130
- Agency approval: UL/CSA

PACKAGING

- Receptacles: Tubes
- Cables: One per bag

Connector Description	Base Part Number	
	PCB Receptacle	Plug Kit
Standard A Plus Power	55917	74233
Slimline A Plus Power	57489	57496
Slimline A Plus Power – mid board mount receptacle	10011029	57496
Slimline A Plus Power – under board mount receptacle	10063583	57496

Cable Termination	Connector Cable End 1	Connector Cable End 2	Cable Color	Cable Length	Part Number
Single-ended	USB+Power 12V	none	Black	1.0m	10084088-Z0100YYLF
Single-ended	USB+Power 12V	none	Black	3.0m	10084088-Z0300YYLF
Single-ended	USB+Power 24V	none	Black	1.0m	10084089-Z0100YYLF
Single-ended	USB+Power 24V	none	Black	3.0m	10084089-Z0300YYLF
Double-ended	USB+Power 12V	2x4 Latch-n-Lok™ receptacle	Black	1.0m	10089745-Z0100YYLF
Double-ended	USB+Power 12V	2x4 Latch-n-Lok™ receptacle	Black	3.0m	10089745-Z0300YYLF
Double-ended	USB+Power 24V	2x4 Latch-n-Lok™ receptacle	Black	1.0m	10089743-Z0100YYLF
Double-ended	USB+Power 24V	2x4 Latch-n-Lok™ receptacle	Black	3.0m	10089743-Z0300YYLF
Double-ended	USB+Power 24V	1x8 Latch-n-Lok™ receptacle	Black	1.0m	10083511-Z0100YYLF
Double-ended	USB+Power 24V	1x8 Latch-n-Lok™ receptacle	Black	3.0m	10083511-Z0300YYLF
Double-ended	USB+Power 12V	2x3 Latch-n-Lok™ receptacle	Black	1.0m	10083512-Z0100YYLF
Double-ended	USB+Power 12V	2x3 Latch-n-Lok™ receptacle	Black	3.0m	10083512-Z0300YYLF

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Disclaimer

Please note that the above information is subject to change without notice.

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