

# **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 propermating 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-O rated

Contacts: Copper alloyShell: Copper alloy

Cables

Cable jacket: PVCContacts: Copper alloy

Data conductors: 28 AWG twisted pairPower 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:  $30m\Omega$  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	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	ConnectorCable 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