# USB+ Power Interconnect System

## COMPACT, ROBUST AND VERSATILE CONNECTOR SYSTEM

Amphenol's USB+ Power Interconnect System was developed to enable additional power to be delivered to peripheral devices connected using USB 2.0 cable links.

- Includes four additional contacts for power delivery
- Rated at 5A/contact, to supplement the connector's current–carrying capability.
- Eliminates the requirement for a separate power source
- Mates with a standard USB 'A' plug
- Individually keyed and color coded for 5V, 12V, and 24V

### TARGET MARKETS

### FEATURES

- Four additional contacts provide up to 5A/contact of additional current–carrying capacity
- Thermoplastic UL94V–0 rated
- Keyed and color coded for different voltages
- Positive latching
- Fully shielded providing USB 2.0 data performance
- Meets USB 2.0 standard
- Ideal for data, Point–of–Sales, hubs and speakers
- Up to 1,500 mating cycles

### BENEFITS

- Eliminates the need for an external power supply in most peripheral device
- High temperature resistance
- Ensures easy identification
- Ensures proper mating and retention
- Ensures high performance
- Compatible with USB 2.0
- Suitable for various application
- Enhanced durability

# ▸ USB+ Power Interconnect System

# TECHNICAL INFORMATION

## MATERIAL

- Receptacles
  - Housing: High Temperature Thermoplastic UL94V–O rated
  - Contacts: Copper Alloy
  - Shell: Copper Alloy
- Cables
  - Cable jacket: PVC
  - Contacts: Copper Alloy
  - Data conductors: 28AWG twisted pair
  - Power conductors: Non–twisted pair
  - Shield: Aluminized foil and 65% coverage Tinned Copper Braid

## MECHANICAL PERFORMANCE

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

## PACKAGING

- Receptacles: Tubes
- Cables: One per bag

## ELECTRICAL PERFORMANCE

- Operating voltage: 12V/24V/24VDC
- Withstanding Voltage: 750VAC min.
- Current rating
  - USB contacts: 1.5A/contact min.
  - Power contacts: 5.0A/contact min.
- Contact resistance: 30mΩ max.
- Signal impedance: 90Ω ± 15%

## SPECIFICATIONS

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

## TARGET MARKETS/APPLICATIONS

Datacom & Telecom

Speaker

Hub
Personal Computer

Point–of–Sale Equipment

# PART NUMBERS

| Connector Description | Base Part Numbers | |
|---|---|---|
| | 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 Numbers |
|---|---|---|---|---|---|
| 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 |