Power Solutions

Amphenol ICC

PwrMAX® G2 Power Connector

HIGHEST DENSITY POWER AND SIGNAL BLIND MATE CONNECTOR

PwrMAX® G2 is the highest density blind mate power and signal connector available. PwrMAX® G2 series carries up to 100A per contact, and features design improvements to reduce board space depth, while also improving the blind mate gatherability. The depth on board has been reduced from 32.4mm to 27.4mm with an overall space savings of 18%.

The guide pins on both ends of the plug have been raised to create room for an additional low-power contact or 6 signal contacts on each side, meaning more power in less space. This new guide pin design also allows for an additional 0.50mm of blind mate gatherability on the Y-axis.

These features make PwrMAX® the ideal solution for any PCB or busbar application that requires high density and high current. These connectors are currently available in orthogonal, mezzanine, right-angle, and coplanar configurations.

- Depth on board reduced by 18%
- Blind mate gatherability increased by 0.5mm on y-axis
- 100A per contact
- Optimized guides offer more power in lesser space
- GCS® plating for low resistance



TARGET MARKETS



FEATURES

- Depth reduced from 32.4mm to 27.4mm
- Optimized guide pins
- GCS® silver-based plating
- Highly configurable
- Orthogonal, mezzanine, right-angle, and coplanar configurations available

BENEFITS

- Overall space savings of 18%
- Allows for more power in lesser space
- 0.3mΩ end-of-life resistance
- The number and placement of power and signal contacts is customizable
- Modular design that can be used for both PCB and busbar applications

TECHNICAL INFORMATION

MATERIAL

- Power Contacts: High conductivity copper alloy
- Housing: High-temperature thermoplastic, UL94V-0
- Contact Finish: GCS® plating over nickel

ELECTRICAL PERFORMANCE

- Current Rating: Up to 100A per contact (30°C temperature rise in still air)
- Dielectric Withstanding Voltage: 2500V
- Contact Resistance: 0.3mΩ max. at end-of-life conditions

MECHANICAL PERFORMANCE

- Mating Force: 25.0N max. per high power contact, 7.0N max. per low power contact
- Insertion Force: 66.70N max. per high power contact, 90.0N max. per low power contact, 26.70N max. per signal contact
- Retention Force: 35.0N min. per high power contact, 15.0N min. per low power contact, 10.0N per signal contact

ENVIRONMENTAL

- Operating Temperature Range: -40°C to +125°C
- RoHS: Compatible according to the European Union Directive 2011/65/EU

SPECIFICATIONS

- Production Specification: GS-20-0447

PACKAGING

- Trays

APPROVALS & CERTIFICATION

- UL and TUV-Approved
- UL/CSA file # E66906, 162
- TUV Certification # B170434414022

TARGET MARKETS/APPLICATIONS



Datacom/Networking Equipment
Switches
Telecom



Servers, Storage



Industrial Equipment

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

PART NUMBERS

Description	Part Numbers
PwrMAX® RA Plug 2HP+18S+2HP STB	10143473-4031000LF
PwrMAX® RA Plug 4HP+24S+4HP STB	10143473-804A000LF
PwrMAX® RA Plug 5HP+12S PF	10143473-502A000LF
PwrMAX® RA Plug 1HP+12S+1HP STB	10143473-202A002LF
PwrMAX® RA Plug 1LP+30S+1LP STB	10143473-025A000LF
PwrMAX® RA Plug 4HP+30S+4HP STB	10143473-805A000LF
PwrMAX® RA Plug 11HP STB	143473-B00A000LF
PwrMAX® RA Plug 10HP+36S STB	10143473-A061000LF
PwrMAX® RA Plug 9HP STB	10143473-900A000LF
PwrMAX® RA Plug 4HP+30S+4HP STB	10143473-805A001LF
PwrMAX® RA Plug 1LP+10HP+36S+1LP STB	0143473-A26A001LF
PwrMAX® RA Plug 18S+7HP STB	10143473-703A000LF
PwrMAX® RA Plug 4HP STB	10143473-400A001LF
PwrMAX® RA Plug 24S STB	10143473-004A000LF
PwrMAX® RA Plug 1LP+3HP+18S STB	10143473-315A000LF
PwrMAX® RA Plug 30S STB	10143473-005A000LF
PwrMAX® RA Plug 1LP+2HP+1LP STB	10143473-202A000LF
PwrMAX® RA Plug 10S+11HP STB	10143473-B02A000LF

PWRMAXG21220EA4

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