# Amphenol



# **Displayport 2.1 Connector**

### DISPLAYPORT SUPER HIGH RESOLUTION VIDEO/AUDIO INTERCONNECT SOLUTION

Amphenol Displayport is a scalable system capable of delivering 1, 2, or 4 lanes of high-definition video at a maximum of 20Gb/s per lane. Displayport also supports 16K superior resolution with 80Gb/s bandwidth.

- Compliant to DP 2.1 specification backward compatible with earlier DP version
- Suitable for DP40, 8K cable, and high interchangeable DP80 market cable
- 16K Resolution (15360x8640) @ 60Hz; Superior signal integrity performance
- Good shielding of ESD and EMI, as well as self-latching feature
- Enhanced Full Size DP, and Type C multiple display interface



#### **FEATURES**

- Compliant to DP 2.1 specification
- Pasive self-latching
- Fully shielded metal shell to reduce EMI and RFI
- RoHS and halogen-free compliance
- High Interchangeable DP80 market cable

#### **BENEFITS**

- 80Gb/s fully backward compatible with earlier Displayport product
- Robust latch connection
- Excellent shielding of ESD and EMI
- Meets environmental, health, and safety requirements
- Superior signal integrity performance

## **TECHNICAL INFORMATION**

#### MATERIAL

- Housing: High temperature thermoplastic, complies with UL 94V-0, Optional color
- Contact: Copper Alloy, Selective Gold plated on contact area, 100µ min. Tin plated on soldering tail, 50µin min. Nickel underplated overall
- Shell: Stainless Steel

#### MECHANICAL PERFORMANCE

- Durability: 10,000 cycles at 100 ± 50 cycles per hour. Per EIA 364-09
- Insertion Force: 44.1 N {4.5kgf} max. Per EIA 364-13
- Withdrawal Force: Type A: 9.8 N {1.0kgf} min/39.2N {4.0kgf} max. Per EIA 364-13

#### **ELECTRICAL PERFORMANCE**

- Low Level Contact Resistance: Excluding conductor Resistance Initial 10m  $\Omega$  max. Per EIA 364-23
- Shell: Initial Contact resistance 30mΩ max. Per EIA 364-23
- Contact Current Rating: 0.5A min. Per EIA-364-70
- Dielectric Withstanding Voltage: 500VAC(RMS). Per EIA 364-20 Method 302
- Insulation Resistance: 100M $\Omega$  min.

#### PACKAGING

Tray / Tape and Reel

#### **APPROVALS & CERTIFICATION**

- VESA
- ENVIRONMENTAL
- Thermal shock:
  - -55°C ~ 30 minute.
- +85°C ~ 30 minute, 10 cycles, EIA 364-32
- Humidity: 60°C, 90~95%RH, 240 hours, EIA 364–31
- Heat Resistance: 85°C, 96 hours, EIA 364-17
- Cold Resistance: -40°C, 96 hours, EIA 364-17
- Solderability: 95% min. solder coverage, EIA 364-52
- Resistance to Soldering Heat: Peak temperature: 260°C max., 10 seconds max.

#### **SPECIFICATIONS**

- Amphenol Product Specification: SFSDP001
- Test Report: R09007–23

#### **TARGET MARKETS/APPLICATIONS**



Telecom/Datacom Equipment



Test Card and Card Extenders High End Computers Servers



Test and Measurement Equipment

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#### Disclaimer

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

## **PART NUMBERS**

| Part Description  | Part Numbers     |
|---|------------------|
| Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 30µin Gold Plating Op-<br>tion, High Temperature Thermoplastic, Black, with Flange, T&R Package | DPF20102711TR    |
| Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 15µin Gold Plating Option,<br>High Temperature Thermoplastic, Black, with Flange, T&R Package   | DPF20102721TR    |
| Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 3µin Gold Plating Option,<br>High Temperature Thermoplastic, Black, with Flange, T&R Package    | DPF20102741TR    |
| Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 30µin Gold Plating Op-<br>tion, High Temperature Thermoplastic, Black, T&R Package              | DPF20102811TR    |
| Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 15µin Gold Plating Option,<br>High Temperature Thermoplastic, Black, T&R Package                | DPF20102821TR    |
| Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 3µin Gold Plating Option,<br>High Temperature Thermoplastic, Black, T&R Package                 | DPF20102841TR    |
| Enhanced Full Size DP, 20 Position, Cable Plug Selective 30µin Gold Plating Option, High Temperature Thermoplastic, Black, Tray Package                                     | G46CA204210L1EU  |
| Enhanced Full Size DP, 20 Position, Cable Plug Selective 15µin Gold Plating Option, High Temperature Thermoplastic, Black, Tray Package                                     | G46CA201210L1EU  |
| Enhanced Full Size DP, 20 Position, Cable Plug, Gold Flash Plating Option, High Temperature Ther-<br>moplastic, Black, Tray Package   | G46CA200210L1EU  |
| DP2.1 DP80 Enhanced DP Module, Length 1M  | GTR040420111C1EU |
| DP2.1 DP80 Enhanced DP Module, Length 1.6M  | GTR040420110C1EU |

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