

# 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



### TARGET MARKETS



### FEATURES

- Compliant to DP 2.1 specification
- Passive 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

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# TECHNICAL INFORMATION

## MATERIAL

- Housing: High temperature thermoplastic, complies with UL 94V-0, optional color
- Contact: Copper Alloy, selective Gold plated on contact area, 100 $\mu$  min. Tin plated on soldering tail, 50 $\mu$ in min. Nickel under-plated overall
- Shell: Stainless Steel

## MECHANICAL PERFORMANCE

- Durability: 10,000 cycles at 100  $\pm$  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 30m $\Omega$  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:
  - $-55^{\circ}\text{C}$   $\sim$  30 minute.
  - $+85^{\circ}\text{C}$   $\sim$  30 minute, 10 cycles, EIA 364-32
- Humidity:  $60^{\circ}\text{C}$ , 90~95%RH, 240 hours, EIA 364-31
- Heat Resistance:  $85^{\circ}\text{C}$ , 96 hours, EIA 364-17
- Cold Resistance:  $-40^{\circ}\text{C}$ , 96 hours, EIA 364-17
- Solderability: 95% min. solder coverage, EIA 364-52
- Resistance to Soldering Heat: Peak temperature:  $260^{\circ}\text{C}$  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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### PART NUMBERS

Part Description	Part Numbers
Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 30 $\mu$ in Gold Plating Option, High-temperature Thermoplastic, Black, T&R Package	DPF20102711TR
Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 15 $\mu$ in Gold Plating Option, High-temperature Thermoplastic, Black, T&R Package	DPF20102721TR
Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 3 $\mu$ in Gold Plating Option, High-temperature Thermoplastic, Black, T&R Package	DPF20102741TR
Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 30 $\mu$ in Gold Plating Option, High-temperature Thermoplastic, Black, with Flange, T&R Package	DPF20102811TR
Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 15 $\mu$ in Gold Plating Option, High-temperature Thermoplastic, Black, with Flange, T&R Package	DPF20102821TR
Enhanced Full Size DP, 20 Position, Receptacle, Right Angle, SMT, Selective 3 $\mu$ in Gold Plating Option, High-temperature Thermoplastic, Black, with Flange, T&R Package	DPF20102841TR
Enhanced Full Size DP, 20 Position, Cable Plug Selective 30 $\mu$ in Gold Plating Option, High-temperature Thermoplastic, Black, Tray Package	G46CA204210L1EU
Enhanced Full Size DP, 20 Position, Cable Plug Selective 15 $\mu$ in Gold Plating Option, High-temperature Thermoplastic, Black, Tray Package	G46CA201210L1EU
Enhanced Full Size DP, 20 Position, Cable Plug, Gold Flash Plating Option, High-temperature Thermoplastic, Black, Tray Package	G46CA200210L1EU
DP2.1 DP80 Enhanced DP Module, Length 1M	GTR040420111C1EU
DP2.1 DP80 Enhanced DP Module, Length 1.6M	GTR040420110C1EU

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)