



### **330-5970-ACT-OPC**

Dell 330-5970-ACT Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 2m)

#### **Features**

- Up to 10Gbps bi-directional data links
- Dual SFP Connectors
- Industry Standard small form pluggable
- Hot Pluggable
- Single Power Supply 3.3V
- Operating Temperature: 0 to 70 Celsius
- RoHS Compliant and Lead-Free



#### **Applications:**

- 10G Ethernet
- 10G Fibre Channel

#### **Product Description**

This is a Dell 330-5970-ACT compatible 10GBase-CU SFP+ to SFP+ direct attach cable that operates over active copper with a maximum reach of 2.0m (6.6ft). It has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. This direct attach cable is TAA (Trade Agreements Act) compliant, and is built to comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

OptioConnect's transceivers are RoHS compliant and lead-free.

## General Specifications

| Parameter                  | Symbol           | Min  | Typ.    | Max.       | Unit  | Notes |
|----------------------------|------------------|------|---------|------------|-------|-------|
| Data Rate                  | DR               |      | 10.3125 |            | Gbps  | 1     |
| Bit Error Rate             | BER              |      |         | $10^{-12}$ |       |       |
| Operating Case Temperature | T <sub>c</sub>   | 0    |         | 70         | °C    | 2     |
| Storage Temperature        | T <sub>stg</sub> | -40  |         | 85         | °C    | 3     |
| Input Voltage              | V <sub>cc</sub>  | 3.14 | 3.3     | 3.46       | V     | 4     |
| Supply Current             | I <sub>cc</sub>  |      | 100     | 300        | mA    | 4     |
| Cable Impedance            | Z                | 90   | 100     | 110        | Ω     |       |
| Product Weight             | GD               |      | 72      |            | g/PCS |       |
| Cable Weight               | GC               |      | 26      |            | G/M   |       |
| Dust Cap Weight            | GS               |      | 0.80    |            | g/PCS |       |
| Wire Gauge                 |                  |      | 30      |            | AWG   |       |
| Tolerance Range            |                  |      | 2       |            | ±cm   |       |

### Notes:

1. IEEE 802.3ae compatible.
2. Case temperature.
3. Ambient temperature.
4. For electrical power interface.

## Pin Descriptions

| Pin | Symbol     | Name/Description                                                | Notes |
|-----|------------|-----------------------------------------------------------------|-------|
| 1   | VeeT       | Transmitter ground. Common with receiver ground.                | 1     |
| 2   | Tx_Fault   | Transmitter Fault.                                              |       |
| 3   | Tx_Disable | Transmitter Disable. Laser output disabled on "high" or "open." | 2     |
| 4   | SDA        | Data line for Serial ID.                                        | 3     |
| 5   | SCL        | Clock line for Serial ID.                                       | 3     |
| 6   | MOD_ABS    | Module absent. Grounded within the module.                      | 3     |
| 7   | RS0        | No connection required.                                         |       |
| 8   | LOS        | Loss of Signal. Logic 0 indicated normal operation.             | 4     |
| 9   | RS1        | No connection required.                                         |       |
| 10  | VeeR       | Receiver ground. Common with transmitter ground.                | 1     |
| 11  | VeeR       | Receiver ground. Common with transmitter ground.                | 1     |
| 12  | RD-        | Receiver Inverted DATA out. AC coupled.                         |       |
| 13  | RD+        | Receiver NonInverted DATA out. AC coupled.                      |       |
| 14  | VeeR       | Receiver ground. Common with transmitter ground.                | 1     |
| 15  | VccR       | Receiver power supply.                                          |       |
| 16  | VccT       | Transmitter power supply.                                       |       |
| 17  | VeeT       | Transmitter ground. Common with receiver ground.                | 1     |
| 18  | TD+        | Transmitter Non-Inverted DATA in. AC coupled.                   |       |
| 19  | TD-        | Transmitter Inverted DATA in. AC coupled.                       |       |
| 20  | VeeT       | Transmitter ground. Common with receiver ground.                | 1     |

### Notes:

1. Circuit ground is isolated from chassis ground.
2. Disabled: Tdis>2V or open, Enabled Tdis<0.8V.
3. Should be pulled up with 4.7kΩ-10kΩ on host board to a voltage between 2V and 3.6V.
4. LOS is open collector output.

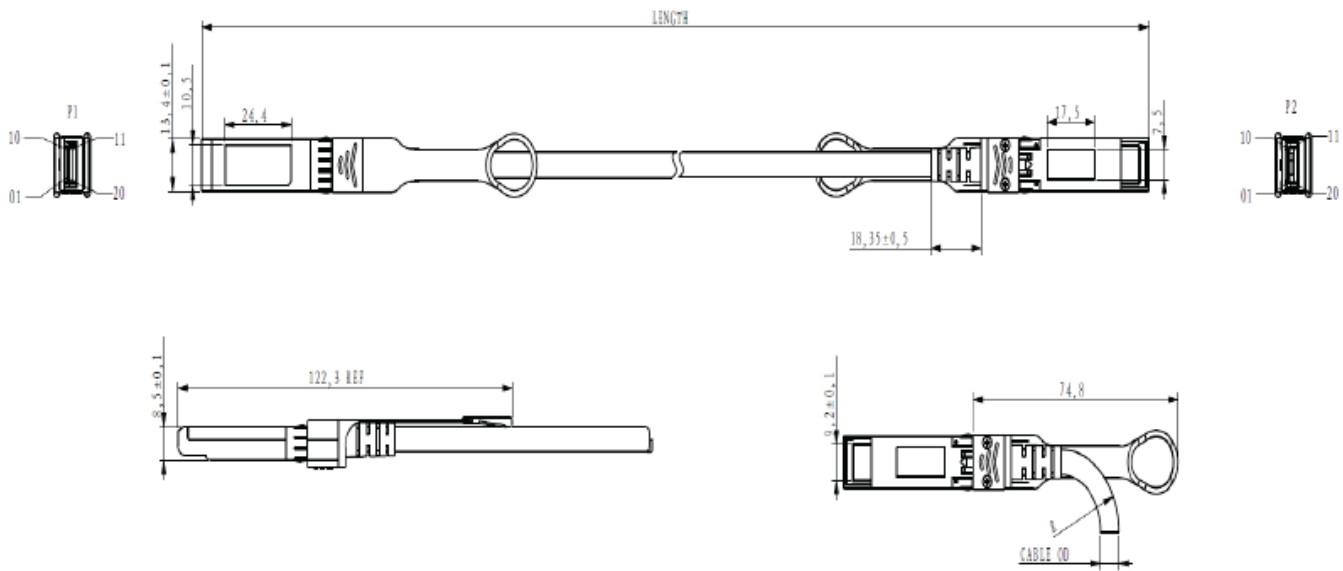
Electrical Pad Layout



Block Diagram



Mechanical Specifications



## **OptioConnect**

### **Innovation for the Future of High-Speed Networking**

#### **Who We Are**

OptioConnect is reshaping the landscape of communication and high-speed networking through intelligent technology. With a core focus on cutting edge technology, we deliver smarter fiber optic solutions for enterprise networks, data centers, and next-gen telecom infrastructures.

#### **What We Do**

At OptioConnect, we fuse advanced engineering with intelligent automation to drive the future of networking. Our AI-integrated solutions are designed to optimize performance and streamline operations with:

- Superior Performance
- Network and traffic optimization
- Intelligent energy management
- Seamless OEM compatibility
- Scalable cost-efficiency

#### **Smarter Networks by Design**

Innovation isn't just a goal—it's our process. We embed AI and machine learning across our R&D and product lines, enabling adaptive performance, automated tuning, and faster deployment cycles. The result? Networks that don't just work—they learn, evolve, and outperform.

#### **Our Team**

Our engineers, data scientists, and network architects bring decades of experience and a future-focused mindset. We provide hands-on support with intelligent insights that turn complex challenges into simple solutions.

#### **Our Mission**

To deliver AI-enhanced connectivity that reduces cost, increases speed, and maximizes efficiency—empowering our partners to operate at the forefront of a rapidly evolving digital world.

#### **Let's Connect**

Discover how OptioConnect's intelligent infrastructure solutions can power your network's next leap forward.

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