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INTRODUCING MHC®-T3

Hermaphroditic MT Connectivity for High-Density Connections

OCC's new patent-pending MHC[®]-T3 is the next generation in compact, high-density, fiber optic connectors. Utilising environmentally protected MT ferrule technology, the MHC[®]-T3 can deliver up to 48 single mode or multimode fibres in a smaller footprint than traditional cylindrical connectors. Coupled with OCC's proven hermaphroditic $\mathsf{MHC}^{\textcircled{R}}\text{-}\mathsf{T3}$ can effectively reduce installation times and platform, ensure superior optical performance. With its variety of options and MHC[®]-T3 OCC's delivers ruggedised features, high-speed communications critical for today's ever increasing bandwidth requirements.

APPLICATIONS

- Network (audio, data, or DMX) professional equipment
- Digital HD video transmissions using fibre optic media
- Future-proof installations designed to eliminate bandwidth limitations
- Noise and EMI protection on audio or video (LED wall) applications
- Deployable broadcast systems
- Remote monitoring sites
- Robotic arms and devices
- Industrial monitoring
- Distributed antenna systems (DAS)
- RF over fibre optic
- FTTA and small cell
- Military applications

FEATURES & BENEFITS

WHEN CONSIDERING A RELIABLE SOLUTION FOR HIGH-CHANNEL COUNT COMMUNICATIONS, OCC'S MHC®-T3 CAN PROVIDE:

• **INSTALLATIONS THAT ARE SIMPLIFIED—REDUCING TIME, EFFORT, AND COSTS.** By utilising proven MT technology, termination of 12, 24, and 48 fibres with one connection drastically reduces installation times and the costs associated with those terminations. OCC's hermaphroditic design easily allows MHC®-T3 connectors to be mated regardless of gender and offers seamless point-to-point connections. In addition, features such as an integrated pulling eye that assists with difficult cable pulls make the MHC®-T3 an ideal choice to ensure easy installations.

• **RUGGEDISED CONSTRUCTION THAT PROVIDES RELIABLE OPTICAL PERFORMANCE AND TRUSTED ENVIRONMENTAL AND MECHANICAL CAPABILITIES.** The MHC®-T3's all-metal shell construction ensures that connections can withstand wide temperature ranges and provide extreme impact resistance. An IP-68 rating reinforces the robust nature of the MHC®-T3 and keeps connector end-faces well protected against dirt, dust, and water. The MHC®-T3 provides a reliable solution for any harsh environment application.

• A VARIETY OF OPTIONS TO MEET ANY APPLICATION. The MHC[®]-T3 provides greater flexibility when configuring communication systems. Available in single-mode with an angled polished (APC), the MHC[®]-T3 can be provisioned in various hermaphroditic plug and receptacle options. Standard MHC[®]-T3 plugs and receptacles are a black anodized aluminum, however, they are also available with alternative plating and base materials to match the application, including nickel Teflon, marine brass, and stainless steel.

FEATURES & BENEFITS



MHC[®]-T3 receptacles can accommodate up to 48 fibres. Robust metal shell construction and strain relief enables MHC[®]-T3 to survive harsh environments.





Secure threaded mating interface allows for quick and easy connections that are ideal for deployable applications or permanent installations. Hermaphroditic connectivity enables plugs to be mated with receptacles or other plug-to-plug segments in a daisy-chain series without compromising polarity. Hermaphroditic connectivity enables plugs to be mated with receptacles or plug-to-pull segments in a daisy-chain series. Pull strength exceeds 300 lb. tensile load when utilising OCC's Optimised Distribution or Breakout style cables.

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PERFORMANCE & MECHANICAL SPECIFICATIONS

PARAMETER	SPECIFICATION	PERFORMANCE
Insertion Loss (UPC) Multimode	TIA-455-171	0.35dB – typical, 0.50dB – max.
Return Loss (UPC) Multimode	TIA-455-107	Min30dB
Insertion Loss (APC) Single-mode	TIA-455-171	0.35dB – typical, 0.50dB – max.
Return Loss (APC) Single-mode	TIA-455-107	Min60dB
Operational Temperature	TIA-455-5	-40°C to +85°C
Storage Temperature	TIA-455-5	-40°C to +85°C
Temperature Humidity Cycling	TIA-455-5	-40°C to +71°C at 95% RH, 240 hrs.
Dust Test	IEC 60529 IP68	8 hrs. dust exposure with 20 mbar
Water Submersion	IEC 60529 IP68	48 hrs. immersion /1 meter water
Cable Retention ¹	TIA-455-6	300 lbs. for 10 minutes
Mating Durability	TIA-455-21	500 cycles
Impact	TIA-455-2	8 drops, 2.4 meters
Vibration	TIA-455-11	10–55Hz, 2 hrs./axis, 3 axis
Mechanical Shock	TIA-455-14	Condition C, 5 shocks/axis
Crush	TIA-455-26	450 lbs.

NOTES: ¹Tested with OCC's ruggedised HC-Series and Distribution "EZ-Strip" cable. OCC MT Optimised cables coupled with MHC®-T3 connectors allow for cable retrieval and deployment, bending and rotational twisting that is not achievable with standard ribbonised fibre cables.

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PRODUCT OPTIONS FOR A COMPLETE MHC®-T3 SOLUTION



Plug-to-Plug Cable Assembly on OCC $MARS^{\textcircled{R}}$ Reel



IP-68 rating means that internal gaskets and O-rings help protect help protect the MHC[®]-T3 in harsh environments and liquid submersions.



 $\mathsf{MARS}^{\textcircled{R}}$ Reel on Tripod





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