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## DIGITUS DN-93903

# DIGITUS DN-93903 Cat 6 LSA Connection Module User Manual

Model: DN-93903 | Brand: DIGITUS

## 1. PRODUCT OVERVIEW

The DIGITUS DN-93903 LSA connection module is designed for connecting or extending twisted pair cables. It provides excellent performance and connection quality for your network infrastructure.

This shielded Cat 6 LSA insulation displacement connector supports transmission characteristics up to 250 MHz and 1GBase-T applications. It is suitable for AWG 22 to AWG 26 solid and stranded conductors.

The module is versatile, suitable for installation in cable ducts, flush-mounted, and surface-mounted applications. It is ideal for extending existing cables or replacing defective cable sections in your network setup.



Image: The DIGITUS LSA connection module showing the internal LSA terminals with color-coded wiring for EIA/TIA 568 A & B standards. An Ethernet cable is connected to a wall outlet, illustrating a typical application.

## 2. SETUP INSTRUCTIONS

Follow these steps to properly install and connect the DIGITUS DN-93903 LSA connection module:

1. **Prepare Cables:** Strip approximately 2-3 cm of the outer jacket from the installation cables you intend to connect. Ensure the twisted pairs remain intact.
2. **Open Module:** Carefully open the LSA connection module to access the LSA insulation displacement terminals.
3. **Wire Termination:** Refer to the color-coded wiring diagram on the LSA terminals (EIA/TIA 568 A or B standard). Untwist the wire pairs minimally and place each individual wire into the corresponding slot on the LSA terminal.
4. **Secure Wires:** Use an LSA punch-down tool (not included) to press each wire firmly into its slot. The tool will simultaneously cut off any excess wire. Ensure a secure connection.
5. **Integrated Strain Relief:** Utilize the integrated strain relief mechanism to secure the incoming cables, preventing accidental disconnections or damage.
6. **Close Module:** Once all wires are correctly terminated and secured, carefully close the module housing.
7. **Mounting:** Mount the module in your desired location (panel, flush-mounted box, or surface-mounted) using appropriate fasteners (not included).

## 3. OPERATING INSTRUCTIONS

The DIGITUS DN-93903 LSA connection module is a passive component designed for permanent cable connections. Once installed, it operates without user intervention.

- **Function:** The module extends or connects two network installation cables, maintaining the Cat 6 performance standards.
- **Connectivity:** Ensure that the connected cables are properly terminated and connected to active network equipment (e.g., switches, routers) for network functionality.

- **Performance:** When correctly installed, the module facilitates data transmission up to 1 Gigabit Ethernet (1GBase-T) with a bandwidth of 250 MHz.

## 4. MAINTENANCE

The DIGITUS DN-93903 LSA connection module requires minimal maintenance due to its robust design.

- **Cleaning:** Keep the module free from dust and debris. Use a soft, dry cloth for cleaning. Do not use liquid cleaners or solvents.
- **Environmental Conditions:** Ensure the module is installed in a dry indoor environment, away from excessive moisture, heat, or direct sunlight.
- **Inspections:** Periodically check the cable connections for any signs of wear, damage, or loose wires. Re-terminate if necessary.

## 5. TROUBLESHOOTING

If you experience network connectivity issues after installing the LSA connection module, consider the following troubleshooting steps:

- **No Network Connection:**
  - Verify that all wires are correctly terminated according to the EIA/TIA 568 A or B standard. Incorrect wiring is a common cause of connection failure.
  - Ensure that the LSA punch-down tool was used correctly, making firm contact and cutting excess wire.
  - Check the integrity of the connected network cables. Test them individually if possible.
  - Confirm that all active network equipment (router, switch, PC) is powered on and functioning correctly.
- **Slow Network Speed:**
  - Ensure that all connections are secure and that no wires are loose or partially disconnected.
  - Verify that the cables used are Cat 6 compliant to match the module's performance.
  - Check for external interference if the module is installed near power cables or other sources of electromagnetic interference. The module is shielded, but proper installation practices are still important.
- **Intermittent Connection:**
  - Re-examine the LSA terminations for any wires that may have come loose or were not fully seated.
  - Ensure the module housing is securely closed and the strain relief is properly applied.

## 6. SPECIFICATIONS

Feature	Description
Model	DN-93903
Transmission Characteristics	Category 6
Application Areas	Up to 250 MHz, 1GBase-T
Standards	ISO/IEC 11801 3rd Edition, EN 50173-1, EIA/TIA 568-C, ANSI, UL
Installation Type	Suitable for duct, flush-mounted, and surface-mounted installation
Cable Installation	LSA-strips, color-coded according to EIA/TIA 568 A & B
Conductor Acceptance	AWG 22-26 solid and stranded conductors
Housing Material	ABS UL-94V-0
RJ45 Jack Contact Material	Nickel-plated phosphor bronze, 0.5 $\mu$ gold-plated contact
RJ-45 Shielding Material	Nickel-plated bronze
LSA Cutting Clamp Material	Krone LSA+, UL 94V-0, galvanized phosphor bronze
PCB	FR4, UL 94V-0
Operating Temperature	-20°C to +70°C
Insulation Resistance	> 500 MOhm
Contact Resistance	< 20 milliOhm
Dielectric Strength	1000 VDC (contact/contact), 1500 VDC (contact/ground)
Product Dimensions (D x W x H)	15D x 9B x 3H centimeters



Image: A close-up view of the DIGITUS LSA connection module, illustrating its compact size with dimensions of 2.6 inches (6 cm) in length.

## 7. WARRANTY AND SUPPORT

### Warranty Information

This DIGITUS DN-93903 LSA Connection Module comes with a **2-year legal warranty**. Please retain your proof of purchase for any warranty claims.

## Technical Support

For technical assistance, installation queries, or troubleshooting beyond the scope of this manual, please contact DIGITUS customer support. Refer to the official DIGITUS website or your product packaging for the most up-to-date contact information.

When contacting support, please have your product model number (DN-93903) and a detailed description of your issue ready.