



## 10G Shielded External Ground - Standard WE/SS RJ45 (Jar of 50)

S45-1155

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**Simply45®** is the industry-leading brand for RJ45 modular plug innovation and performance solutions.

Up until now, using an RJ45 modular plug to terminate shielded 10G LAN cables such as Cat7a, Cat7 and Cat6a were time-consuming, frustrating, and if you ever put a Fluke test on longer distance links or channels, the results were not exactly stellar. Of course, you could use an industrial-style RJ45 Field Plug connector, but those are expensive and still require more effort than they should. The **Simply45®** engineering team did extensive testing and development to design a high-performing Standard WE/SS (8P8C) RJ45 modular plug solution that was both easy to use and cost-effective.

Introducing our **S45-1155** Standard WE/SS Shielded with External Ground RJ45 Modular Plugs for 10G LAN cables with FPE insulated wires. FPE (foam polyethylene) insulated wires are found on most of today's 10G Shielded LAN such as Cat7a, Cat7, Cat6a with S/FTP, U/FTP, and F/FTP LAN cable constructions. The **S45-1155** are IEEE 802.3 10GBase-T compliant.

*Note: If you are using a larger diameter shielded LAN cable with PE (solid polyethylene) we recommend using our S45-1150 Standard RJ45 modular plug or the **Simply45®** ProSeries Pass-Through part S45-1755P.*

The uniquely designed **Simply45® S45-1155** simplifies and improves the terminated plug performance for shielded 10G LAN cables. The **S45-1155** shielded modular plugs are by far the highest performing, easiest to use, and most cost-effective way to professionally terminate 10G Shielded LAN cables with FPE insulated wires.

The **S45-1155** incorporates the following features:

**Two-Piece Plug.** We tried all that we could to use a one-piece design, but it proved too difficult to work with during the testing trials. As such, we separated the metal shell shield from the RJ45 body. This allowed us to make additional modifications and the result is a dramatically improved termination process that is *faster and easier to use*. The metal shell quickly and easily snaps onto the plug body prior to crimping the plug. Separating the plug body from the metal shield allows the large diameter shielded LAN cables to be inserted further into the plug. This is a significant advancement in RJ45 design because this feature improves NEXT performance by reducing the length of untwisted wires inside the plug. Please refer to our Technical Bulletin "It's All About Those Twists" for more information on how this feature raises RJ45 performance.

The **S45-1155** supports performance standards: ANSI/TIA 568.2-D for Cat7 and Cat6a; ISO/IEC 11801 Class F, Ea and E. Supports 10GBaseT performance applications over PE insulated shielded twisted pair cables.

**Bar45™ Load Bar.** The exclusive **Simply45® Bar45™** are load bars designed to match specific **Simply45®** RJ45 modular plugs to improve termination performance and SIMPLIFY the termination process. The innovative **Bar45™** that is designed specifically for our part **S45-1155** are the easiest to use load bars ever made for terminating 10G LAN cables with FPE insulated wires.

The **S45-1155 Bar45™** is designed specifically for our **S45-1155** Standard Shielded with External Ground WE/SS (8P8C) RJ45 modular plug.

**S45-1155 Bar45™** does several things to improve performance of 10G twisted pair cables and make it easier to use than any other load bar:

1. **S45-1155 Bar45™** is made of materials that provide better signal isolation and substantially reduces the effects of crosstalk inside the RJ45 mod plug. **Bar45™** absorbs and limits both near-end crosstalk (NEXT) and far-end crosstalk (FEXT), thereby improving 10G cable performance.
2. The **S45-1155 Bar45™** innovative design reduces the length of untwisted wires inside the plug improving twisted pair signal performance and substantially reduces the introduction of NEXT into the signal.
3. **S45-1155 Bar45™** combined with Simply45's internal RJ45 design innovations allows the LAN cable itself to be inserted further into the plug, reducing the length of untwisted wires. This symbiotic design of load bar and internal RJ45 plug design helps maintain improved headroom performance and better signal integrity than any other Standard RJ45 solution for shielded 10G cables.
4. The uniquely designed **Bar45™** does not require the frustrating tasks of trying to insert larger wire conductors in the very small holes found on most other load bars. That design was not acceptable to **Simply45®**. **Bar45™** simply requires you to insert 4 wires into **Bar45™** and then insert another 4 wires (according to the wire pattern being used). Trim the wire, then simply slide **Bar45™** back to the LAN cable jacket. Fast... Simple... and Easy to Do. No more headaches fiddling with wires trying to get them inserted into a load bar.

The **S45-1155 Bar45™** design is also used with the **Simply45®** Pass-Through RJ45 modular plug for Shielded LAN cables, part S45-1755P. Once you have used the **S45-1155 or S45-1755P Bar45™** you will never want to use anything else for terminating 10G Shielded LAN cables for Cat7a, Cat7, Cat6a with S/FTP, U/FTP, or F/FTP cable constructions.

Works in all compliant RJ45 modular plug sockets. Supports performance standards: ANSI/TIA 568.2-D and ISO/IEC 11801.

**3 Prong Pin Design with 50μ of True 24ct Gold Plating.** All **Simply45®** Standard WE/SS RJ45 modular plugs use only 50μ 24ct gold plated 3-Prong pin design instead of a 2-Prong design as found on many other Standard RJ45 modular plugs. A 3-Prong pin provides 3 points of contact with the copper wire conductor instead of 2. This improves electrical performance and signal integrity. A 3-prong pin also holds stronger onto the wire conductors.

**Solid LAN Cables.** The **S45-1155** is ideal for most shielded 10G LAN cables with FPE (foamed polyethylene) wire conductors. Supports 23 AWG LAN cables with a maximum cable diameter of 8.0mm (0.315") and wire conductor sizes 1.21mm – 1.45mm (0.047" – 0.057"). The **S45-1155** works great with Cat7a, Cat7, Cat6a LAN cables with S/FTP, U/FTP, and F/FTP cable constructions.

**Improved Crosstalk Performance.** The unique internal design of the **S45-1155** Standard RJ45 modular plug allows the LAN cable to be inserted further into the RJ45 plug. This reduces the length of untwisted wires improving NEXT performance. Our **S45-1155** plug design and **Bar45™** provide the best crosstalk performance of any shielded RJ45 plug on the market.

**Commercial Rated.** These RJ45 mod plugs are UL94 V0 (IEC 60695-11-10) rated for all commercial installations. These RJ45 mod plugs are recommended for CMP Plenum, CMR, CM; and LSZH up to B2ca rated LAN cables.

**Color Tinted RJ45 Modular Plugs.** The **S45-1155** comes with a light Orange tint for easy pass-through RJ45 modular plug identification. No more trouble identifying which plug is which. All **Simply45®** RJ45 modular plugs are color-coded for easy identification.

**Wide Mouth Jar for Easy Hand Access.** No need to spill RJ45 mod plugs out of the jar just to reach them.

**Color-Coded Jar Caps.** The **S45-1155** jar cap is Orange matching the color tint of the RJ45 mod plug. This makes it very easy to find identify the items in your bag or kit. Saves time identifying the RJ45 modular plugs that you need to use.

**UL Listed.** The **S45-1155** Standard WE/SS RJ45 modular plugs are UL Listed and bear the UL Logo on the **Simply45®** packaging. Only **Simply45®** provides the UL Listed logo for quality and safety on pass-through RJ45 modular plugs. UL is the strictest 3rd party verification service in the world and products bearing the UL mark represent the highest quality and safety standards.

**PoE/PoH Rated.** The **S45-1155** is ideal for PoE/PoH applications. The **S45-1155** uses the correct 3-Prong Pin design; true 24ct gold plated pins; fully shielded and is made using the highest quality materials for RJ45 modular plugs. This all ensures lower resistance and less heat build-up than cheaper made RJ45 that are out on the market.

**Compliant to Industry Standards.** ANSI/TIA 568.2-D Class E, 1096-A; ISO/IEC 11801 Class E, 60603-7, 8877:1992; FCC

Dimensions (in/mm): 3.9 x 3.7 x 3.2 in / 100 x 95 x 82 mm