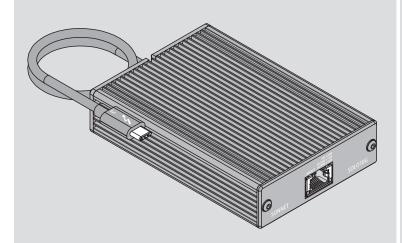
Solo10G[™] Thunderbolt[™] 3 Edition 10GBASE-T/NBASE-T[®] to Thunderbolt 3 Adapter

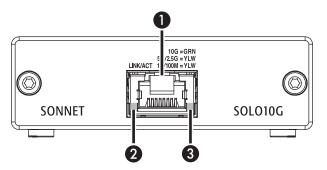
Quick Start Guide





©2021 Sonnet Technologies, Inc. All rights reserved. Sonnet, SONNETTECH, the Sonnettech logotype, and Solo10G are trademarks of Sonnet Technologies, Inc. Mac, the Mac logo, and macOS are trademarks of Apple Inc., registered in the United States and other countries. Thunderbolt and the Thunderbolt logo are trademarks of Intel Corporation in the U.S. and/or other countries. Other product names are trademarks of their respective owners. Product specifications subject to change without notice. QS-SOLO10G-TB3-E-G-030421

Solo10G Thunderbolt 3 Edition Description



1 – RJ45 (10GBASE-T/NBASE-T) Port Connect a Cat 6A, Cat 6 or Cat 5e* cable between this port and the switch's or device's RJ45 port.

2 - Link/Activity Indicator

This LED flashes green to indicate a link is established between the adapter and the switch, and flashes yellow when the link is training.

3 - Link Speed Indicator

When a link is established between the adapter and the switch, this LED lights to indicate the link speed to the switch: green = 10Gb; yellow = 5Gb, 2.5Gb, 1Gb, or 100Mb.

* 10 Gb/s speed supported on Cat 6A and Cat 6 cabling at 100 and 55 meters, respectively. Lower speeds supported on Cat 5e and better cabling at up to 100 meters. 5 Gb/s and 2.5 Gb/s link speed support requires an NBASE-T (multi-Gigabit) compatible switch.

Mac[®] Compatibility

- Mac (Intel[®] or M1) with Thunderbolt 3 ports
- macOS[®] 10.13.6+
- macOS Big Sur compatible

Windows[®] Compatibility

- PC with Thunderbolt 3 ports
- 64-bit editions of Windows® 10, Version 1909 or later

Important Note: Windows computers require the latest BIOS and Thunderbolt drivers to support this product. Check with your computer manufacturer for update information.

Linux[®] Compatibility

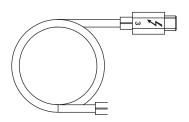
- PC with Thunderbolt 3 ports
- Linux Kernel 5.0 or later

Support Note: This document was up to date at the time of printing. However, changes to the hardware or software may have occurred since then. Please check the Sonnet website for the latest documentation.

1. Go to https://www.sonnettech.com/support/kb/kb.php

- 2. Navigate to and click the Solo10G Thunderbolt 3 Edition link.
- 3. Click the Manual link.
- 4. Click the Solo10G Thunderbolt 3 Edition Quick Start Guide [English] link and then check the Document Version information. If the version listed is later than this document (revision G), click the Download Now button for the latest version.





Thunderbolt 3 Connector—Plug this connector into one of your computer's Thunderbolt 3 ports (often indicated by a ½ logo), or at the end of a Thunderbolt device chain. Ports marked with the generic USB icon (•<>>) are NOT compatible.

Driver Information

For Mac users, the drivers required to support this product are installed as part of macOS 10.13.6 and later; the Sonnet adapter is ready for use when you power on your computer.

For Windows users, please go to www.sonnettech.com/support/kb/ kb.php. Navigate to and click the Solo10G Thunderbolt 3 Edition link, and then click the Driver link. Locate, download, and install the Windows drivers.

For Linux users, the drivers required to support this product are installed as part of Linux Kernel 5.0 and later, though more current drivers may be available: Go to www.sonnettech.com/support/kb/kb.php, navigate to and click the Solo10G Thunderbolt 3 Edition link, and then click the Driver link. If the listed Linux driver version is later than the one installed in your system, download and install the drivers.

Basic Configuration Information—macOS

With the Solo10G adapter connected to your computer and network infrastructure, configure the adapter's settings in the System Preferences' Network preferences panel. The adapter will be identified as Thunderbolt Ethernet Slot x.

Performance Tuning Steps—macOS

Listed below are steps required to configure the Solo10G adapter for maximum performance. Please note that to take advantage of these settings, the switch or router to which the adapter is connected (and every component in the path) must also support these features.

Support Note: In order to realize maximum 10Gbps performance, the adapter's duplex setting must be set to full-duplex, and the MTU (frames) setting set to Jumbo (9000). For a large frame to be transmitted intact from end to end, every component in the path must support that frame size. The switches, routers, and NICs from one end to the other must all support the same size of jumbo frame transmission for a successful jumbo frame communication session.

- 1. Open System Preferences, and then click Network. In the Network preferences panel, click the Solo10G adapter (Thunderbolt Ethernet, Slot x) in the left panel, and then click Advanced; a new panel appears.
- 2. In the new panel, click Hardware. From the Configure dropdown menu, select "Manually". In the Speed drop-down menu, leave the setting at or select "10GbaseT" (or "5000baseT" or "2500baseT" if either is the top speed your network connection supports). In the Duplex drop-down menu, select "full-duplex" (*not* "full duplex, flow-control"). In the MTU drop-down menu, select "Jumbo (9000)" or select "Custom," and then enter "9000" in the box below.

Tips, General Information

5 Gb/s and 2.5 Gb/s Link Speed Support

The Solo10G supports 5 Gb/s and 2.5 Gb/s link speeds when used with NBASE-T compatible (multi-Gigabit) switches and connected via CAT 5e (or better) cabling.

Solo10G May Become Very Warm While Operating

At times, the Solo10G adapter may become very warm to the touch, especially while transferring very large files or transferring a large amount of data over an extended period of time; *this is normal* and does not indicate a malfunction. The adapter may also operate at a higher than expected temperature when connected to a long cable run to the switch or storage system. Sonnet designed the Solo10G so that its case radiates heat away from the electronic components inside, ensuring they operate within a safe temperature range.

Performance May Drop When Used With a Notebook Running on Battery Power

When the MacBook Pro's or MacBook Air's battery level drops below 20%, macOS will decrease Ethernet performance in order to conserve battery life.

Audio Video Bridging (AVB) Support

The Solo10G supports AVB when used with AVB-compatible (802.1Qav) switches.

Solo10G Requires a Thunderbolt 3 Port to Operate

The Solo10G T3E adapter is *not* compatible with the Apple Thunderbolt 3 (USB-C) to Thunderbolt 2 adapter; the Sonnet adapter requires more power than a Thunderbolt 2 connection can provide.

- 3. When you've finished changing the settings, click OK.
- **4.** Back in the main Network window, click Apply after you've completed changing the settings.



Support Note: For additional info on improving throughput under macOS, visit the Solo10G support page.

- Go to www.sonnettech.com/support/kb/kb.php
 Navigate to and click the Solo10G Thunderbolt 3 Edition link, and then click the FAQ link.
- **3.** Click the link for article ID 814.

Basic Configuration Information—Windows

Configure the Solo10G adapter's settings using Windows Device Manager. You may locate the device in the Network adapters category, listed as Sonnet Solo 10G Thunderbolt 3 Edition.

First Time Use—Windows

The first time you connect the Solo10G Thunderbolt 3 Edition adapter to your computer, an *Approve New Thunderbolt™ Devices* window will appear. From the drop-down menu select Always Connect, and then click OK.

Basic Confiruration Information—Linux

The steps necessary to configure the Sonnet adapter with your computer may vary based on the version of Linux running. Sonnet recommends using whatever method or tools you would normally use for configuring any onboard ports.

Operating System (OS) Updates May Cause Issues

Specific device drivers that work under one OS version may not work under a later version, and OS updates may corrupt preferences or configurations. Before updating your computer to the latest OS, we recommend that you check the Solo10G Thunderbolt 3 Edition support page to verify that the existing drivers work.

Contacting Customer Service

Before contacting Customer Service, please check the Sonnet Web site (www.sonnettech.com) for the latest updates and files. Email requests generally receive the fastest responses, and are usually processed within a 24-hour period during normal business hours, excluding holidays. When you contact Customer Service, please have the following information available:

- Product name
- OS version

4

• A System Report (macOS) or a Microsoft System Information MSINFO32 (Windows) report (Windows), along with a description of the issue(s) you are encountering with your device

If further assistance is needed, contact **Sonnet Customer Service** at: **E-mail**: support@sonnettech.com Tel: 1-949-472-2772 (Monday–Friday, 9 a.m.–5 p.m. Pacific Time, excluding holidays)

Japan Customers

Contact Sonnet Customer Service Japan at: E-mail: jp.support@sonnettech.com

6

5