

GrandCare Internet Requirements

Revised 24 Apr 2024

Internet Requirements

The touchscreen must be connected to the Internet by one of the following methods:

- wired, via a LAN port on the back of the touchscreen; or
- wireless, via the Setup Wizard Network Configuration page; or
- GrandCare Connector, converting mobile wireless connection to LAN connection

Minimum bandwidth	1 Mbps
-------------------	--------

WiFi Recommendations

If the touchscreen receives internet connectivity through WiFi, we make the following recommendations about your network:

- Provide a WPA/WPA2 SSID with a password, preferably without any other resident/caregiver personal devices that might interfere with the touchscreens
- DO NOT use an open SSID with a web-based login (Walled Garden). While the touchscreens *can* connect to these networks, our experience is that the authentication only lasts for a limited time, after which the touchscreen will require authentication again.
- Since the touchscreens do not require especially fast connections, we prefer 2.4GHz because of its better wall penetration
- Avoid having both 2.4GHz and 5GHz as separate networks with the same SSID. We have found that, under certain circumstances, this can lead to the touchscreen bouncing between the two connections and causing unstable connectivity

Firewall Requirements

If your organization runs a protective firewall on your network you may need to adjust settings in order for the touchscreen to function properly. The touchscreen establishes a VPN connection to the home server for secure bidirectional communications, but it will also use common ports for communicating with the internet (HTTP, HTTPS, NTP, etc). The following **outgoing** ports should be allowed by your firewall:

Port Range	Protocol	Servers	Description
80, 443	TCP	*	Allow HTTP and HTTPS
123	UDP	*.debian.pool.ntp.org	Allow NTP from pool servers
11194-11197, 12194	UDP	*.grandcare.com	Required for OpenVPN
30000-49999	TCP	*.grandcare.com	Required for OpenVPN Proxy