| Classification | ☐ tDS/tGW/tSH ☑ PETL/tET/tPET/ET-2200 ☐ DS/PDS/PPDS ☐ tM-752N<br>☐ I/O Card ☐ VXC Card ☐ TouchPAD/HMIWorks ☐ VxComm | | | | |
|---|---|---|---|---|---|
| **Author** | Tammy | **Date** | 2018-12-05 | **No.** | FAQ008 |

# Q: What is the maximum length of the Ethernet cable?

**A:** The maximum length of the Ethernet cable is 100 meters when using a single ET-2200 module.

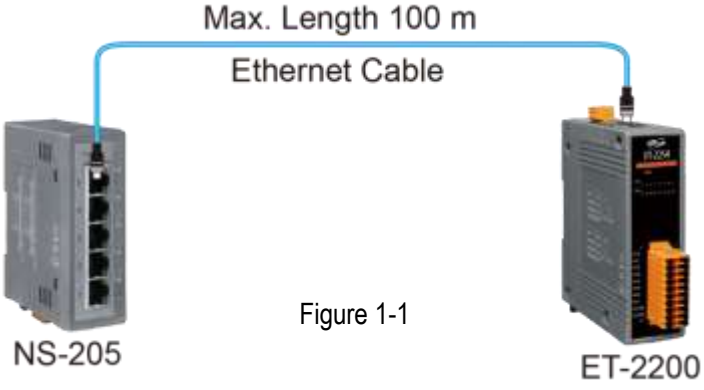



Figure 1-1

The ET-2200 series module has a built-in two-port Ethernet switch that can be used to implement daisy-chain topology. If multiple ET-2200 series modules are powered normally, then the maximum length of the Ethernet cable is also 100 meters for each upward and downward Ethernet port on the ET-2200 modules.

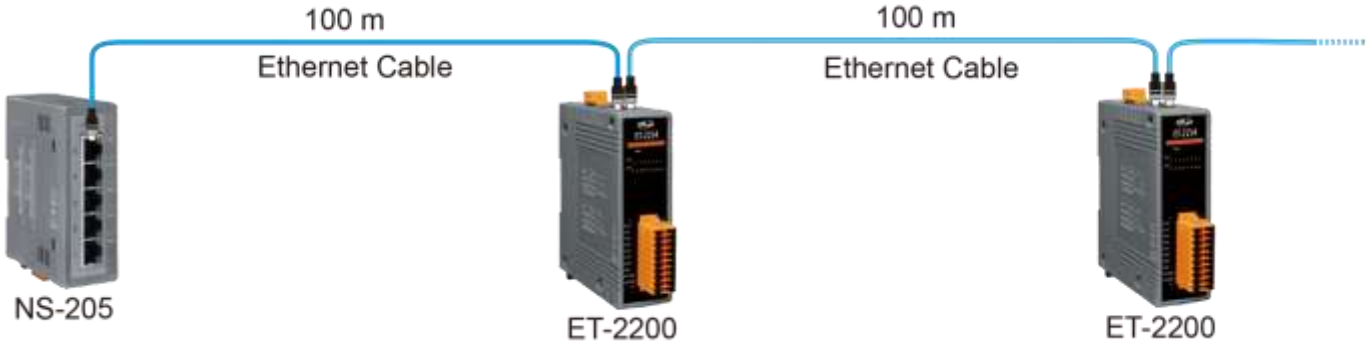



Figure 1-2

The LAN-bypass function will be activated if power to the ET-2200 module is lost. Note that the length of the cable when using a daisy-chain topology for Ethernet communication will be reduced since the LAN-bypass function does not provide driving capability on an Ethernet. Consequently, no matter how many modules in the daisy-chain network are powered off, the maximum length for each communication line between the currently powered modules is only 100 meters, as illustrated in the application diagram below, Figures 1-3 to 1-5.

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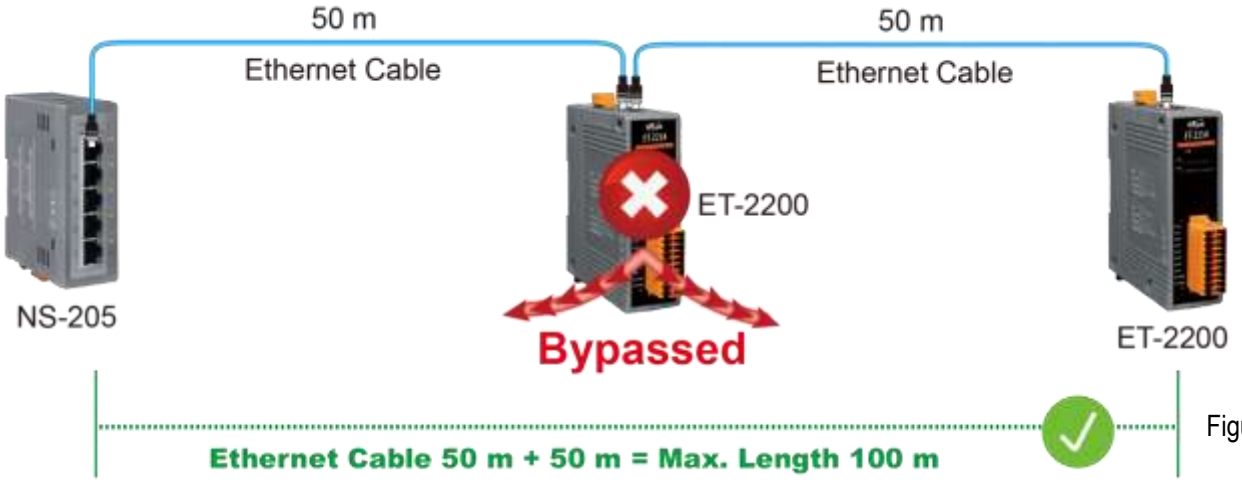



Figure 1-3

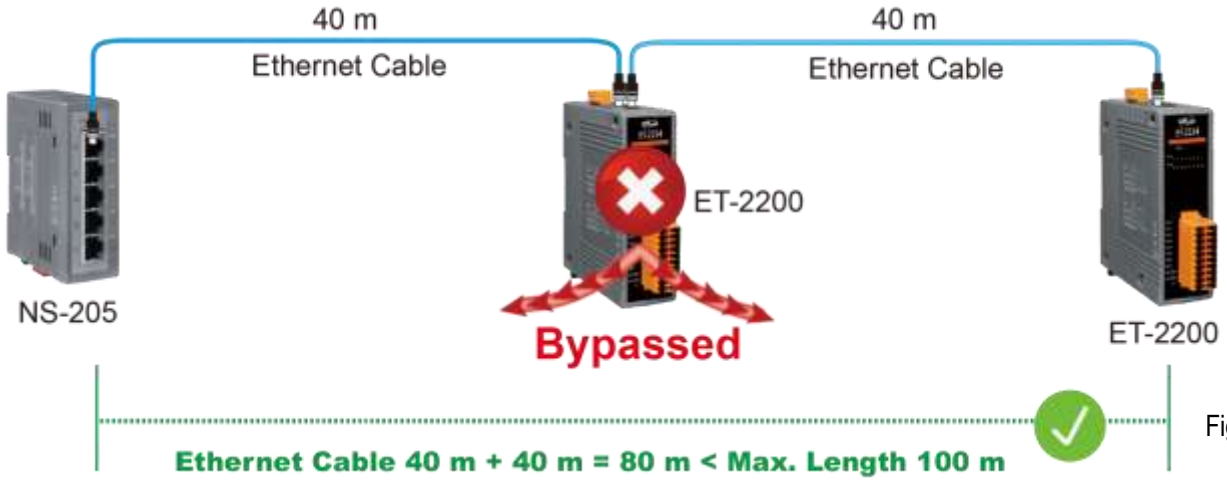



Figure 1-4

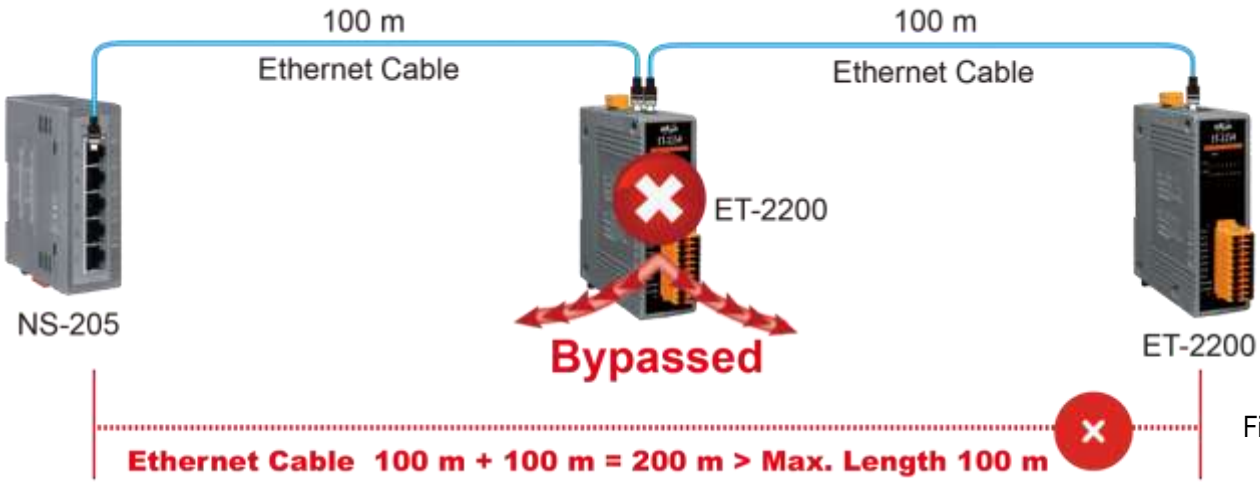



Figure 1-5

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We would suggest the total length of daisy-chain wiring is less than 100 meters for best and stable communication. In case of any ET-2200 module is powered off, the cable length is still meets the specification of Ethernet cabling. Therefore, other ET-2200 modules in the daisy-chain wiring can still communicate with the host computer successfully.

For low-cost construction, the maximum lengths of Ethernet cable between each module are still 100 meters if user accepts the power and communication issues above.

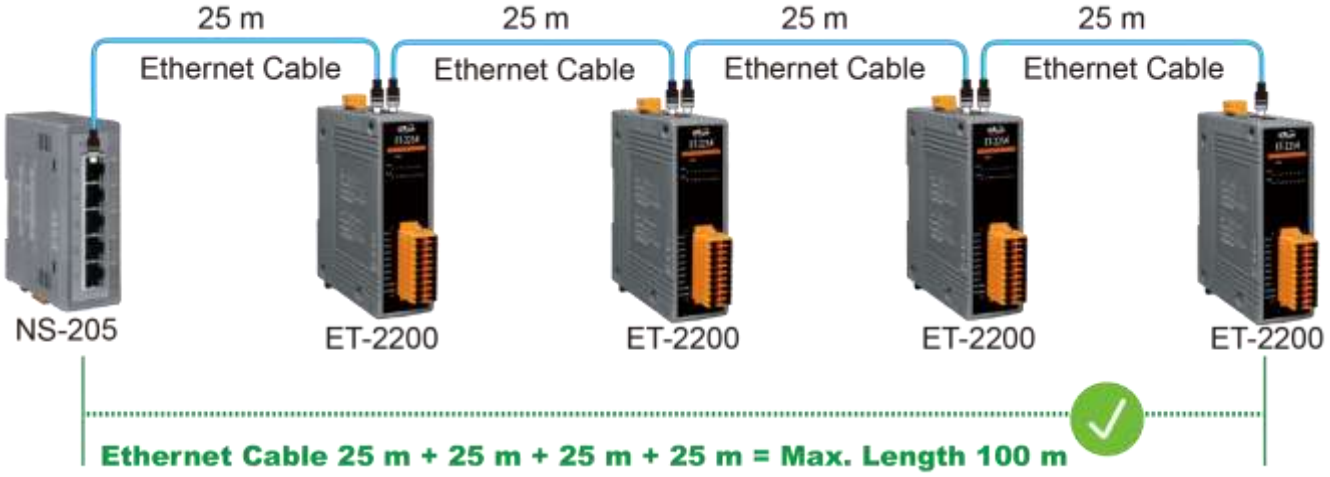



Figure 1-6

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