

Ethernet-enabled Light Sources

Selected Phoseon UV LED curing products are now available with Modbus TCP communication protocols. The FireLine™ FL400/FL440 and FireJet™ ONE/FJ100 Gen2/FJ200/FJ240 are available in both the legacy version and an ethernet-enabled version.

For customers who prefer to communicate with light sources using analog and RS485 commands, Excelitas will continue to offer the legacy version, so users can continue to enjoy the Phoseon branded light sources with legendary reliability and performance, along with the familiar communication method.

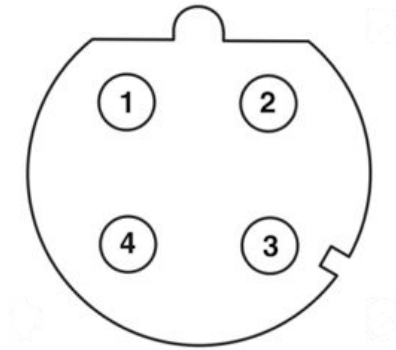
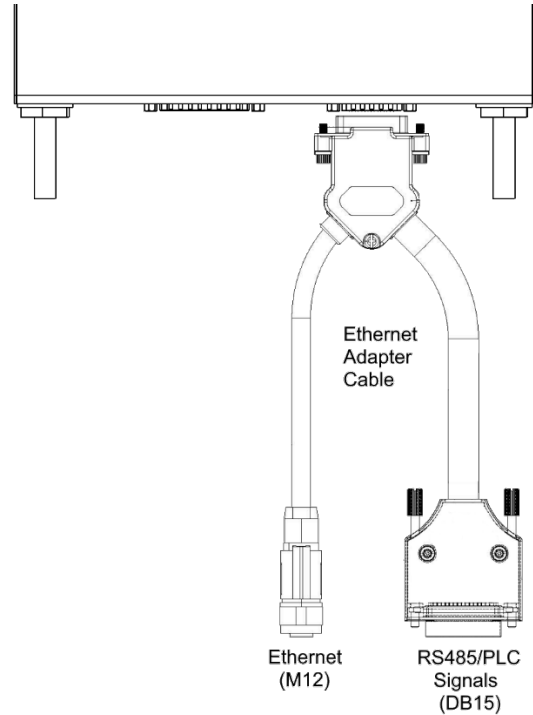
For customers who prefer to utilize the added benefit from the ethernet-enabled version, running on the well-known Modbus TCP protocol, the user can enable/disable the UV light, control UV intensity, query log files for troubleshooting purposes, and query other status values of the light source remotely anywhere, anytime. The user will be able to control and monitor multiple light sources at the same time without physically daisy chaining light sources, as long as the light sources are connected via ethernet.

Another benefit that comes with ethernet-enabled light sources is having individual Semiconductor Light Matrix™ (SLM) intensity control. All ethernet-enabled light sources have the capability to run each SLM at different intensity settings, ranging from 6% to 100%. Light sources can also be queried to confirm whether UV is enabled.

The ethernet connection is 10/100 Mbps with auto-negotiation for duplex mode.

Users also have the option to choose how to communicate with the light source using different methods. For example, one could use analog signals to control the UV on/off and intensity, while sending all other commands over ethernet.

Ethernet communication is accessed using the Ethernet Adapter Cable. The ethernet signals are brought out from the light source and accessed via a 4-pin D-Coded M12 connector. Note that the M12 connector is included as part of the Ethernet Adapter Cable and is not present on the light source assembly itself.



M12 Pin Number	Description
Pin 1	Ethernet TX+
Pin 2	Ethernet RX+
Pin 3	Ethernet TX-
Pin 4	Ethernet RX-