Corning Cable Systems Plug & Play™ Universal Systems are preterminated optical fiber cabling systems designed to dramatically streamline the process of deploying an optical network infrastructure in the premises environment, particularly in data center applications. This innovative, value-added system significantly reduces installation time and cost. The preterminated components are simple to configure and can be installed, connected and operational in a fraction of the time when compared to using conventional, field-termination methods. The system's modular design guarantees compatibility and flexibility for all optical connection spans and easily scales up as demands dictate and requirements change.

Plug & Play Universal Systems offer enhanced networking flexibility in meeting current infrastructure requirements and future networking moves, adds and changes.

- Two or more MTP® Connector trunks can be easily linked together; high-fiber-count trunks can be routed to an intermediate distribution area where small-fiber-count trunks are interconnected and distributed to zone and equipment distribution areas.
- Provides a simple migration path between 2-fiber and parallel applications.
- No special polarity components or polarity concerns during link configuration and reconfiguration.
- Modules and harnesses are wired the same to simplify system assembly; module-to-module, module-to-harness, or harness-to-harness all provide the same fiber paths.
- Avoids polarity problems caused by incorrect placement of fiber pair-wise flipped modules or jumpers in the network.
- System length is expandable by using Plug & Play Universal Systems Extender Trunks without impacting transmit/receive polarity.

**Installing the System**

MTP Connector trunks consist of optical fiber trunk cables preterminated with high-density 12-fiber MTP Connectors and a factory-installed pulling grip. Simply install the cable utilizing the pulling grip. Once deployed, remove the pulling grip and directly plug the MTP Connector into Plug & Play Universal Systems modules or harnesses for a simple and fast solution with easy scalability. Correct fiber polarity is guaranteed throughout the system. Modules and harnesses conveniently load into LANscape® Solutions hardware.

With Corning Cable Systems Plug & Play Universal Systems, there are only three steps required to install the optical network:

1. **Pull the trunk cable**
2. **Mount the hardware**
3. **Connect the connectors**

There is no time-consuming fiber preparation and termination. There are no consumables or piece parts and no tools are needed other than a screwdriver. All cable assemblies are custom-built to each customer's design specifications.
Plug & Play™ Universal Systems
A LANscape® Pretium™ Solutions Product

Plug & Play™ Universal Systems Trunks
New smaller epoxy plugs and pulling sleeves make the trunks easier and quicker to install than other preterminated fiber optic cabling solutions. The pulling sleeves incorporate a new quick entry zippered removal system to access the protective grip and the smaller design allows for installation through smaller conduits and pathways. The new, reusable pulling grip has a clam-shell design that offers unsurpassed connector protection and fast, intuitive access to connectors providing rapid network deployment.

New molded features in the trunk furcation plugs integrate into Corning Cable Systems hardware and attach quickly into equipment racks or cabinets with optional mounting brackets.

System trunks use the MTP® Connector, which is a 12-fiber connector with a footprint similar to the SC simplex connector. These high-density connectors are used to significantly accelerate the network cabling process, minimize errors and reduce space. Plug & Play™ Universal Systems utilizing MTP Connectors can support up to 216 fibers.

The high-density MTP Connector allows the use of compact multifiber cables instead of bulkier simplex cable or several low-fiber-count cables. Up to 45 percent space savings and three times the fiber capacity can be achieved over traditional bulkier cabling solutions.

Plug & Play Universal Systems Extender Trunks
Plug & Play Universal Systems Extender Trunks are manufactured with pinned MTP Connectors on one end of the cable trunk and non-pinned MTP Connectors on the other end. The pinned MTP Connectors mate with the non-pinned connectors of the Plug & Play Universal Systems trunk and the non-pinned MTP Connectors are plugged into the Plug & Play Universal Systems module or harness. Multiple extender trunks can be plugged into each other to extend system length to where it’s needed.

Plug & Play Universal Systems Harnesses
Plug & Play Universal Systems Harnesses are used to break out the 12-fiber MTP Connectors terminated on trunk cables into simplex- or duplex-style connectors. Harness assemblies have a pinned MTP Connector on one end that connects to a Plug & Play Universal Systems trunk. The other end is equipped with single-fiber or MT-RJ connectors and is designed to accommodate many ranges of leg length requirements to ease fiber routing.

Corning Cable Systems Plug & Play Universal Systems harnesses are targeted for data center and high-fiber-count telecommunications systems where there is no room to mount interconnect hardware into racks or cabinets. The 2.0 mm legs for single-fiber and MT-RJ connectors provide a more rugged solution than products with 900 µm legs. Used with the Plug & Play Universal Systems trunks or extender trunks, they provide quick installation in applications where up-jacketed legs are needed for direct installation into electronic equipment. They provide a routing solution that is less dense than traditional jumpers since the ribbon cable end of the harness is much smaller than the equivalent six 2-fiber jumpers.

Plug & Play Universal Systems Modules
Corning Cable Systems Plug & Play Universal Systems Modules are used to break out the 12-fiber MTP Connectors terminated on trunk cables into simplex- or duplex-style connectors. Simplex- and duplex-style jumpers can then be used to patch into system equipment ports, patch panels or client ports. The module features simplex or duplex port adapters across the front and one or two MTP Connector adapters across the back. A factory-installed and tested optical fiber assembly inside the module connects the front adapters to the back MTP Connector adapter(s). The modules fit into standard Corning Cable Systems LANscape® Solutions patch panels and are available with 12-fiber configurations for ST® compatible, MT-RJ, LC or SC duplex connectors and 24-fiber configurations for MT-RJ and LC connectors. MT-RJ and MTP Connectors are pinned to coincide with system parameters.

Using modules provides adaptability for the changing data center environment. Facing technology refresh frequencies of 12-18 months, Plug & Play Universal Systems modules used in the data center offer a great advantage. When future connector requirements change, CCH modules can easily be swapped out with new ones, leaving the existing trunk cable infrastructure in place.

Patch Cords
A variety of single- and 2-fiber patch cords are available to complete the data center cabling infrastructure.

Plug & Play Universal Systems are constructed with a value-added fiber polarity wiring solution that is not backwards compatible with systems utilizing a fiber pair-wise flip polarity solution such as those placed in the trunk or module.