

FastSelfClean™ connector technology



High-density
connectivity.

Ultra-low loss
performance.

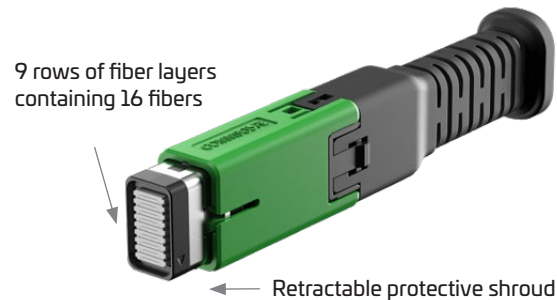
Super-fast
deployment.

THE NEXT EVOLUTION OF FIBER CONNECTIVITY

FastSelfClean technology is CommScope's innovative answer to the most demanding data center and AI factory fiber connectivity needs. It's designed to deliver ultra-low loss performance, increase density and speed up deployments by virtually eliminating the need for routine fiber inspection and cleaning at installation. FastSelfClean technology is designed to enable scale-up, scale-out and scale-across applications, and enable the efficiencies of co-packaged optics and optical scale-up to drive an effective long-term infrastructure strategy.

HIGH DENSITY AND GREATLY REDUCED MATING FORCE

Initially to be offered in a 144-fiber form factor, FastSelfClean technology features a stacked fiber architecture that packs incredible density into its compact footprint. FastSelfClean connectors will also be available in customizable, stackable units of 8, 12 or 16 fibers.

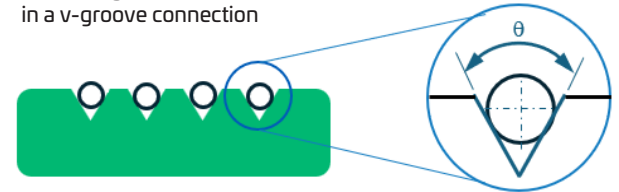


Specifications for the upcoming FastSelfClean connector solution:

Optical	Fiber type Fiber count/connector configuration Insertion loss at 1310nm Return loss at 1310nm	Singlemode (SM) 144 (9x16) < 0.1 dB Typical; 0.25 dB Maximum > 70 dB Typical; 55 dB Minimum
Mechanical	Dimensions (H x W x D) Mating force Durability	23.48 x 15.6 x 125.6 mm (Green) 36 N 50 mating cycles, minimum
Environmental	Operating temperature	-10° C to +60° C

To optimize optical matching and provide ultra-low loss, the adapter uses V-grooves to prevent lateral or angular movement during mating, which requires up to **75% less mating force than standard multi-fiber connectors.**

Fewer degrees of freedom
in a v-groove connection



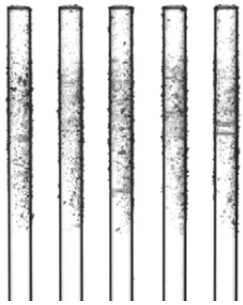
EXCEPTIONAL OPTICAL PERFORMANCE

FastSelfClean connector technology delivers superior optical performance over that of standard multi-fiber connectors. CommScope® lab prototype connector tests reveal **consistent <0.25 dB insertion loss and >55 dB return loss**, substantially better than available from either ferrule-based or lensed connector options.

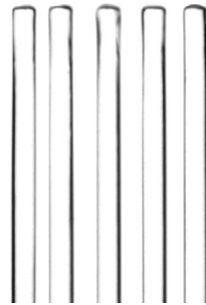
Reduce connection installation time by up to 98.5%

FastSelfClean connector technology is designed to virtually eliminate routine fiber inspection and cleaning

FastSelfClean connector technology means faster, simpler and lower-risk installation because the fibers are concealed safely inside the shroud until mated via a stackable alignment engine. The fibers pass through an active-cleaning mechanism in the process of connection that automatically washes the fiber end-faces—not only for the initial connection, but again and again.



Before passing through active cleaning



After passing through active cleaning

DUST EXPOSURE TESTING PROVES PERFORMANCE

This innovative design virtually eliminates the need for routine inspection and cleaning at the time of installation. CommScope lab prototype tests using the Telcordia GR-326 Arizona dust process reveal **no significant increase in attenuation or reflectance was observed after the dust exposure**—and no time-consuming inspection or cleaning required at any point in the process.

Combined with its incredible density—the 144-fiber connector is designed to enable up to 3,456 fiber connections in 1RU with just 24 clicks—**FastSelfClean connector technology can reduce connection installation time by as much as 98.5%.**

FIBER EVOLUTION TO DRIVE YOUR AI REVOLUTION

CommScope is the go-to partner for hyperscale AI, colocation, enterprise and service provider data centers worldwide. We deliver innovative fiber technologies that reduce complexity, accelerate deployments and empower emerging applications—especially AI—with global capacity and expertise.

