

# Sylex s.r.o.



- qualified operator
- measuring at wavelengths 850nm,1310nm,1490nm,1550nm,1625nm
- measuring IL according to IEC 61300-3-4
- measuring IL according to IEC 61300-3-34
- measuring RL according to IEC 61300-3-6

Sylex s.r.o. offers services in the field of measuring Insertion Loss & Return Loss of single-fiber and multi-fiber connectors according to IEC and Telcordia by measurement systems IQS-12001B from EXFO.

# IQS-12001B

## Cable Assembly and Component Test System—IQS-12001B

Used for insertion loss (IL) and mandrel-free reflection testing for all types of fiber-optic interconnect cables and for component assemblies such as planar arrays and PLC splitters used in FTTx systems.



### System overview

The IQS-12001B system features a loss test module (IQS-3250/3250B), optional optical switches and a software package that integrates and manages test sequences, the database and its results, as well as the peripherals such as barcode reader, label printers and foot switches used in production environments.

### Loss and reflectance measurements

The IQS-3250/3250B Loss Test Module is based on advanced time-domain technology with a wide-aperture integrating cavity detector. The module's internal monitoring channel ensures IL measurement accuracy while its internal reflectance reference significantly improves multimode and singlemode reflectance measurement performance; in singlemode assembly, it also accounts for the effects of Rayleigh backscattering in each measurement. Combined with EXFO's advanced detection electronics and algorithms, the IQS-3250/3250B provides highly accurate mandrel-free reflectance measurements for even the most difficult-to-test APC connectors.

ORL and IL testing of cable assemblies and passive components

Mandrel-free measurement (singlemode and multimode)

### Integrating Cavity Technology

EXFO has developed an innovative detector assembly for the IQS-12001B\*. Using wide-aperture integrating cavity packaging, the detector has many properties that make it ideal for interconnect testing. The wide aperture allows it to be used for simplex and multifiber connectors. Because it uses integrating cavity technology, connector alignment is less critical and polarization dependence is negligible. The end result is increased accuracy, repeatability and flexibility. The integrating cavity technology is similar to what is known in the industry as the integrating sphere technology. Geometry is the major distinction between the latter and EXFO's integrating cavity, which is more ellipsoidal than spherical. The interior of the cavity is coated with a light-reflecting material. The light entering the integrating cavity generates a uniform field of light within the cavity. Combining an integrating cavity with a detector and the right diameter input port provides a major advantage: power measurements are independent of the fiber's numerical aperture, ferrule polish (PC or APC) and alignment, since the cavity scatters all incident light, with the same average power reaching the detector. Integrating cavity technology is a built-in feature of the two detectors used with the IQS-12001B Cable Assembly Test System, the IQS-3250 Loss Test Module and the IQS-9403 Loss Meter.

### Key features

- \* High-sensitivity, mandrel-free reflectance measurements down to  $-75$  dB, meeting requirements for the most demanding FTTH applications
- \* Simultaneous measurement on four wavelength (850, 1310, 1490, 1550 and 1625 nm)
- \* Open architecture allows for customizable controls and remote configuration
- \* Compatible with simplex, duplex, multifiber, bundle, hybrid and fanout cable assemblies, as well as PLC splitters and planar arrays