

# Performance & Warranties Profile

for

## Belden IBDN Gigabit System 4800LX Certified System Installations

Belden will provide its authorized Certified System Vendors (CSVs), for the benefit of their end users, with both an extended Belden IBDN Component Warranty and a lifetime Application Assurance Program for all Belden IBDN Certified Systems installed by the CSV.

The extended Belden IBDN Component Warranty and the lifetime Application Assurance Program are offered to the CSV by Belden, Inc., in accordance with the following terms and conditions.

This Warranty and this Assurance Program apply only to Belden IBDN Certified Systems installed by CSV acting as an authorized Certified System Vendor (CSV) and in compliance with the CSV Agreement.

A Belden IBDN Certified System is a structured cabling system that has been engineered, designed and installed by the CSV acting as an authorized Belden CSV. The engineering, design and installation of the Belden IBDN System must be performed in accordance with all applicable Belden IBDN guidelines, Belden IBDN practices, and other Belden IBDN documentation in effect at the time of installation. Belden IBDN structured cabling installations that meet these requirements will receive a Certification Registration Number and Certification Plaque or Certificate from Belden and will then be designated as a Belden IBDN Certified System, eligible for the extended Belden IBDN Component Warranty and lifetime Application Assurance Program described below.

In order to maintain the validity of the extended Belden IBDN Component Warranty and the lifetime Application Assurance Program, the Belden IBDN Certified System must be maintained in accordance with the Belden IBDN User Manual in effect at the time of installation.

### Extended Belden IBDN Component Warranty:

Belden warrants that;

- i) the Belden IBDN passive components installed in the Belden IBDN Certified System are covered by a manufacturer's warranty against defects in material and workmanship for a period of twenty-five (25) years from the date of installation, at the original installation location.
- ii) the Belden IBDN Certified System will meet or exceed the UTP channel transmission requirements specified by:  
ANSI/TIA/EIA 568-B.2-1, Category 6  
ISO/IEC FDIS 11801:2002, Class E

Once an installed Belden IBDN passive component has been deemed defective by Belden, Belden shall repair or replace, at Belden's discretion, the defective component. Belden may use refurbished materials in either repair or replacement procedures, and the repaired or replaced component will be warranted for the balance of the original twenty-five year warranty period, or, ninety (90) days, whichever is longer.

The repair or replacement of a defective component under this warranty includes the reasonable costs of labor required to repair or replace the defective component. The decision of repair or replacement of components, and the selection of labor services

to perform the repair or replacement are at the sole discretion of Belden, Inc.

### Application Assurance:

In addition to the extended Belden IBDN Component Warranty, Belden also provides a lifetime Application Assurance Program for all Belden IBDN Certified Systems.

Belden's lifetime Application Assurance Program warrants that the Belden IBDN Certified System will be capable of supporting all industry standard Applications during its entire installation life at its original installation location.

Industry standard Applications include;

- i) all Category 5, Category 5e and Category 6 Applications identified in the current (at time of installation) Belden IBDN documentation, and;
- ii) any Category 5, Category 5e and Category 6 Applications introduced at a future date by recognized standards bodies and user forums that use ANSI/TIA/EIA 568-B.1, ANSI/TIA/EIA 568-B.2-1, Category 6 and ISO/IEC FDIS 11801:2002, Class E UTP channel specifications for cabling.

In the event that the Belden IBDN Certified System is unable to support an existing or future industry standard Application as defined above, and such failure can be attributed to a deficiency in the Belden IBDN System, Belden will provide at, its expense, reasonable expertise, Belden IBDN materials and labor as required to remedy the problem and/or resolve the claim. The decision of repair or replacement of materials, and the selection of labor services to perform the remedial services are at the sole discretion of Belden, Inc.

### Limitations

Belden, Inc. will not be liable for, nor pay for, any loss of use of the Belden IBDN System or products; costs of substitute goods, facilities or services; or for any other economic losses or incidental, consequential or exemplary damages.

This Extended Product Warranty and Application Assurance for the Belden IBDN Certified System does not cover any deficiencies in the System which result from failure to comply with Belden design guidelines and installation procedures.

Belden, Inc. shall not be liable for damages or defects resulting from circumstances beyond its control, including but not limited to, misuse, alteration, unauthorized repair, damages in transit, fire, floods and acts of God.

Repair or replacement of the Belden IBDN Certified System by Belden, Inc. is your exclusive remedy.

This is the only warranty on the Belden IBDN Certified System. There are no other warranties, express or implied, made by Belden, Inc.

### Belden IBDN System 4800LX Gigabit Cabling Solution

In addition to the extended Belden IBDN Component Warranty and lifetime Application Assurance Program described above, Belden IBDN System 4800LX Certified Systems that conform with the Belden IBDN System 4800LX Channel Configuration are guaranteed to meet or exceed the following performance parameters for the duration of their installed lifetime at the original site of installation. All conditions regarding original design, installation and maintenance for Belden IBDN Certified Systems must be met in order to validate these performance parameter guarantees.

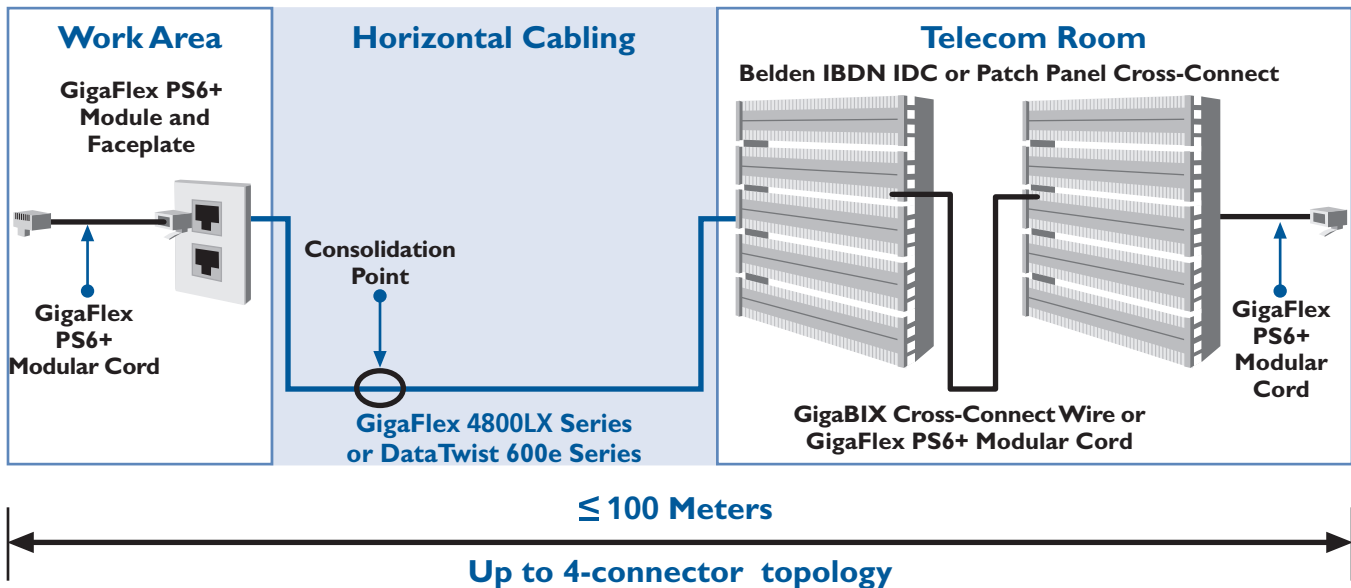
### Belden IBDN System 4800LX Performance Parameters

• Bandwidth	300 MHz
• Data Rate Capacity	4.8 Gb/s

### Belden IBDN System 4800LX “Beyond Category 6™”

Specifications Parameter	@100 MHz	@200 MHz	@300 MHz
PSNEXT	44.7 dB	39.1 dB	34.6 dB
Insertion Loss	18.5 dB	27.3 dB	34.6 dB
PSACR	26.2 dB	11.8 dB	0.10 dB
PSELFEXT	27.3 dB	21.3 dB	17.8 dB
Return Loss	14.0 dB	10.0 dB	8.20 dB
Propagation Delay	490 ns	490 ns	490 ns
Delay Skew	25 ns	25 ns	25 ns

### Belden IBDN Gigabit System 4800LX Channel Configuration



### Belden IBDN Gigabit System 4800LX Matrix

Work Area		Consolidation Point		Horizontal Cable	Telecom Room	
Outlets (Connectors - Faceplates & Adapters)	Modular Cords	Consolidation Point Connecting Hardware	Component between the Consolidation Point and the Work Area Outlets		Cross-Connect or Interconnect Hardware	Cross-Connect or Interconnect Patch System
GigaFlex PS6+ Module	GigaFlex PS6+ Modular Cord	GigaBIX IDC Connector	DataTwist 600e 7851 (CMR) DataTwist 600e 7852 (CMP) GigaFlex 4812LX (CMR) GigaFlex 4813LX (CMP) GigaFlex 4824LX (LSZH)	DataTwist 600e 7851 (CMR) DataTwist 600e 7852 (CMP) GigaFlex 4812LX (CMR) GigaFlex 4813LX (CMP) GigaFlex 4824LX (LSZH)	GigaBIX Cross-Connect System	GigaBIX Cross-Connect Wire GigaBIX PS6+ Patch Cords
Interface Plates European Style Faceplates French Style Mosaic Faceplates MDVO Adapters MediaFlex Outlets		Flex Patch Panel / GigaFlex PS6+ Module GigaFlex PS6+ Patch Panel	Single Ended PS6+ Modular Cords		Flex Patch Panel / GigaFlex PS6+ Module GigaFlex PS6+ Patch Panel	GigaFlex PS6+ Modular Cord