

Commercial Networking – Training



Table of Contents

Commercial Networking – Training	Page No.
Overview: Belden IBDN Training	17.2 17.3–17.6
Course Descriptions/Course Number	
Intro to Belden Belden IBDN 305	17.3
Project Management Belden IBDN 201/202	17.3
Design and Concept Belden IBDN 303	17.4
Installation Belden IBDN 700	17.4
Copper Products Belden IBDN 726	17.5
Optical Fiber Products Belden IBDN 746	17.5
End-to-End Installation/Testing – Copper Belden IBDN 727	17.6
End-to-End Installation/Testing – Optical Fiber Belden IBDN 747	17.6

Overview



Ensuring Competency Worldwide

The Belden IBDN training center has been an integral part of the structured cabling industry landscape for over 14 years, having earned an international reputation for delivering the industry's most comprehensive and effective structured cabling training.

This reputation is forged on the experiences of more than 65000 students trained worldwide since 1991. Today, the Belden IBDN training center serves the needs of more than 5000 students each year. Our goal is to provide our students with the skills and knowledge necessary to ensure the highest quality and optimal performance in every Belden IBDN system that they design and install.

Ensuring competency and understanding of new technologies, techniques and industry standards is a key goal in our course development. Each Belden IBDN training course is regularly updated to include the most current information on Belden IBDN products and practices, as well as new developments in cabling industry standards.

Learn from the Experts

Belden IBDN instructors have combined experience of well over 100 years in the planning, design and installation of structured cabling systems. In addition to real life experiences, most are BICSI[™] accredited RCDD and RCDD/LAN specialists, and many have additional technical credentials from industry leaders such as Microsoft[™] and Cisco Systems[™]. Many of them have taught Belden IBDN courses all around the world, and all have the industry knowledge and professional teaching style that maximizes the learning experience.

The Purpose of the Belden IBDN Training Center

To ensure solid and optimal network performance, a cabling system supplier should be evaluated on the following criteria:

- · Credibility and industry standing
- System offerings
- Customer care
- Business partners
- Warranty program

Through the Belden IBDN training center, Belden ensures that our students and business partners consistently and accurately represent Belden IBDN systems, products, and installation standards, with the goal of optimizing network performance.

For More Information and Registration

For information on course dates, locations and fees, please refer to: www.beldenibdn.com. Or contact your nearest Belden office. Please look at the back cover of this catalog for this.

Course Descriptions



General Course Information

- Our courses are recognized by BICSI and earn BICSI Continuing Education Credits (CECs).
- Our courses qualify students by giving them a professional recognition that may accelerate their career advancement.
- In addition to the cabling contractor community, our courses are recognized and valued by endcustomers, architects, engineers and consultants as well. If you need to increase your knowledge of structured cabling systems, the Belden IBDN training center is an excellent training investment.
- Our course content is offered in many different languages including English, French, Japanese, Spanish, Mandarin and Cantonese.
- Refresher courses for pre-qualified students are also available.
- Special rates and group discounts are available.
- Fees include a certificate of completion for selected courses, continental breakfast, coffee breaks and course materials.

Belden IBDN 305

Introduction to Belden (by correspondence on CD Rom)

Who Should Attend:

End-users, networking and structured cabling sales people

Course Benefits:

Provides students with an overview of Belden as a leader in telecommunications and offers an overall picture of the Belden IBDN Systems and products, as well as the positioning of Belden in the industry.

What will be Covered:

- · Introduction to cabling
- Overview of Belden IBDN systems and products, including:
 - GigaFlex cables: 1200, 2400, 4800LX,
 - Bonded-pair cables: DataTwist 350, MediaTwist[®], DataTwist[®] 600e,
 - GigaBIX, Fiber*Express*, IntelliMAC-Plus, PowerSense and 10GX solutions.
- · Certification and exercises
- Case studies
- · Reference materials

Prerequisite: None Written Exam: Yes BICSI CECs: RCDD (7), INS, Level 2/Technician (7)

Belden IBDN 201/202

Project Management for Belden IBDN including Belden IBDN System Audit (2 days)

Who Should Attend:

Installation managers, installation supervisors participant must be familiar with Belden IBDN systems as well as the certification program

Course Benefits:

Develop the skills to recognize the scale of the project and therefore be prepared to put an efficient work plan in place in order to deliver the project on time.

Gain an understanding of the Belden IBDN system design and installation requirements as related to the Belden IBDN certification program.

Learn how to conduct and write audit reports.

What will be Covered:

- · Project manager responsibilities
- Project planning
- Project execution
- · Project closing
- When, why and how audits are conducted
- · Audit preparation
- · Audit visit
- Audit report

Prerequisites: Belden IBDN-303* and Belden IBDN-700* *Taken after January 2001 Written Exam: Yes, two BICSI CECS: RCDD (14), RCDD/LAN (14), INS, Level 2/Technician (12), OSP (14), RES (12)

Course Descriptions

Belden IBDN 303

Belden IBDN Design and Concept (2 days – Can also be provided by correspondence on CD Rom)

Who Should Attend:

Architects, designers, networking consultants

Course Benefits:

Gain the ability to design a Belden IBDN structured cabling system.

Learn about standards and planning procedures related to the installation of structured cabling systems.

What will be Covered:

- · Belden IBDN systems and products:
 - GigaFlex cables: 1200, 2400, 4800LX,
 - Bonded-pair cables: DataTwist[®] 350, MediaTwist[®], DataTwist[®] 600e,
 - GigaBIX, Fiber*Express*, IntelliMAC-Plus, PowerSense and 10GX solutions
- · Structured cabling overview
- · Standards update
- Horizontal distribution standards
- Backbone distribution standards
- Entrance facility
- Bonding and grounding
- Reference materials

BELDDEN

• 60% In-class exercises

Prerequisite: None Written Exam: Yes BICSI CECs: RCDD (14), INS, Level 2/Technician (14)

Belden IBDN 700

Belden IBDN Installation (2 days)

Who Should Attend:

Belden Certified System Vendor (CSV) installers, and distributors

Course Benefits:

Develop a fundamental understanding of a Belden IBDN structured cabling system.

Gain valuable experience on how to install and maintain a complete Belden IBDN structured cabling system.

What will be Covered:

- · Belden company overview
- · Structured cabling history
- · Standards overview
- Belden IBDN systems and products:
 - GigaFlex cables: 1200, 2400, 4800LX,
 - Bonded-pair cables: DataTwist[®] 350, MediaTwist[®], DataTwist[®] 600e,
 - GigaBIX and Fiber Express solutions
- · Certification overview
- Installation preambles for Belden IBDN Systems
- · Work area products installation:
 - GigaFlex Modules, faceplates and workstation outlets
- · BIX and GigaBIX solutions:
 - IDC system installation
 - Wall mount, rack-mount patch panel system installation
- · Modular jack and patch cord system

What will be Covered (continued):

- · High-density PS5E/PS6+ patch panel system
- · PS5E patch box and multi-user box
- PS5E DV0 outlets, MDV0 adapters and EZ-MDV0 modules
- · Optical fiber overview
 - Belden IBDN Fiber Express systems and products
 - Products overview, fiber termination, (1U/2U), (3U) and (4U) patch panel installation
- OPTIMAX field installable connector (ST, SC, LC)
- Breakout kit installation
- 10GX solution overview
- · Reference materials
- 75% In-class exercises

Prerequisite: None Written Exam: No BICSI CECs: RCDD (14), INS, Level 2/Technician (14)

Course Descriptions

Belden IBDN 726	Belden IBDN 746	
Belden IBDN Copper Products (1 day)	Belden IBDN Fiber Products (1 day)	
Who Should Attend:	Who Should Attend:	
Structured cabling installers	Structured cabling installers	
Course Benefits:	Course Benefits:	
Gain the ability to install copper structured cabling systems.	Gain an understanding of the principles behind optical fiber cabling media.	
What will be Covered:	Gain the ability to install optical fiber components and solutions.	
Belden company overview		
Belden IBDN systems and products:	What will be Covered:	
- GigaFlex cables: 1200, 2400, 4800LX,	Belden company overview	
 Bonded-pair cables: DataTwist[®] 350, MediaTwist[®], DataTwist[®] 600e, 	Optical fiber overview	
- GigaBIX	- Belden IBDN Fiber <i>Express</i>	
 Installation preambles for Belden IBDN systems 	system and products	
Work area products installation:	 Products overview, fiber termination, (1U/2U), (3U) and (4U) patch panel installation 	
- GigaFlex modules, faceplates	OPTIMAX field installable connector (ST, SC, LC)	
and workstation outlets	Breakout kit installation	
BIX and GigaBIX solutions:	Reference materials	
 IDC system installation Wall mount, rack mount 	• 75% In-class exercises	
patch panel system installation	Prerequisite: None	
 Modular jack and patch cord system 	Written Exam: No	
High-density PS5E/PS6+ patch panel system	BICSI CECs: RCDD (7), INS, Level 2/Technician (7)	
PS5E patch box and multi-user box		
 PS5E DV0 outlets, MDV0 adapters and EZ-MDV0 modules 		
 10GX solution overview 		
Reference materials		
• 75% In-Class exercises		
Prerequisites: None		
Written Exam: No		
BICSI CECs: RCDD (7), INS, Level 2/Technician (7)		
	W	
	•	



Course Descriptions

Belden IBDN 726

Belden IBDN End-to-End Installation and Testing – Copper Media (2 days)

Who Should Attend:

Belden channel partners or employees contractors, technicians, supervisors, engineers and designers

Course Benefits:

Learn detailed installation methods of key copper Belden IBDN system components.

Learn appropriate methods and procedures of testing copper Belden IBDN systems.

What will be Covered:

- Review Belden IBDN systems and key copper components
- Basic balanced twisted-pair transmission and performance theories
- · Installation practice reviews
- Installation and testing of End-to-End systems
- · In detail, installation methods of:
- Copper Belden IBDN systems components,

Belden IBDN 1200, 2400 and 4800LX Systems including:

- GigaFlex cables: 1200, 2400 and 4800LX,
- Bonded-pair cables: DataTwist[®] 350, MediaTwist[®], DataTwist[®] 600e
- Learn testing methods of Belden
 IBDN systems and how to troubleshoot
 typical problems
- Understand the correlation between:
 - Basic theories of end-to-end system transmission,
 - Component and system installation practices,
 - Test results and system performances
- 10GX solution overview
- 90% In-class exercises

BELDDEN

Prerequisite: None Written Exam: Yes BICSI CECs: RCDD (14), INS, Level 2/Technician (14)

Belden IBDN 746

Belden IBDN End-to-End Installation and Testing – Optical Fiber Media (2 days)

Who Should Attend:

Belden channel partners or employees contractors, technicians, supervisors, engineers and designers



Course Benefits:

Learn detailed installation methods of key Belden IBDN Fiber*Express* system components.

Learn appropriate methods and procedures of testing Belden IBDN Fiber*Express* systems.

What will be Covered:

- Review Belden IBDN Fiber Express systems and key fiber components
- Basic optical fiber transmission and performance theories
- · Installation practice reviews
- Installation and testing of End-to-End systems
- In detail, installation methods of:
 - Belden IBDN Fiber*Express* system components,
 - Belden IBDN Fiber*Express* systems including: multimode (FX300, FX600 and FX2000) and single-mode systems
- Learn testing methods of Belden IBDN systems and how to troubleshoot typical problems
- · Understand the correlation between:
 - Basic theories of end-to-end system transmission,
 - Component and system installation practices,
 - Test results and system performances
- 90% In-class exercises

Prerequisite: None Written Exam: Yes BICSI CECs: RCDD (14), INS, Level 2/Technician (14)