# HUBBELL® EDUCATION Application Guide



# HUBBELL The Education Connection



## **Hubbell – The Education Connection**













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**Raceway & Sensors** 







## **Hubbell Solutions for Education Facilities**

The need for technologically advanced, cost-effective, safe and long-lasting facilities has today's schools and universities faced with a new reality in planning and carrying out new and retrofit facility projects. Today's education facilities must take into account several factors during construction and renovation. From classrooms and learning spaces, to administration and facility operations, Hubbell Wiring Systems has the solutions to help education facilities meet these key challenges.

## **Effectively Delivering Power,** Data and Audio/Video (AV)



Today's education facilities need to ensure effective power, data and AV delivery to support everything from online e-learning, interactive audio/video and multimedia video presentations, to real-time delivery of the latest research information and enhanced communication—all of which has become vital to modern teaching, learning and decision making.

## **Reducing Upfront and Long-term Facility Costs**

When updating inadequate facilities, schools and universities need to reduce initial upfront and long-term costs by ensuring that projects are completed quickly and efficiently. At the same time, planning new and retrofit projects requires solutions that enable lower maintenance and operating costs over the life of the facility.

## **Maintaining Energy Efficiency and Sustainability**

To further reduce operating costs, education facilities administrators and designers are thinking long-term, striving for energy efficiency. The use of energy-saving technologies including open space environments that increase daylight and data center designs for improving airflow are just some of the ways education facilities can ensure more energy efficient, sustainable facilities.

## **Ensuring Maximum Safety and Durability**

Education facilities are demanding environments where maintaining safety for both students and staff is critical. New and retrofit projects therefore require devices that ensure safety, are durable and impact resistant to withstand everyday use, and provide reliable, long-lasting performance.

For more than 100 years, Hubbell has provided high-performance, reliable solutions for primary, secondary and higher education facilities. Only Hubbell has the comprehensive line of wiring devices to help today's educational facilities effectively deliver power and technology, reduce costs and ensure maximum safety.







Safety



Energy Savings



Sustainability



Durability

3

## **Primary and Secondary Education Facilities**





4 4 W . W . O. 10 S . U W

minim

## Power, Data and Audio/Video Delivery

Technology is helping engage students, improve teaching, and facilitate communication. Hubbell's power, data and AV delivery solutions support everything from smartboards and projector systems, to computers and networking equipment.

- Multimedia Audio/Video connections and enclosures
  - Copper and fiber network
     cable and connectivity
  - Data center and cable management solutions

## **Installation Efficiency**

Hubbell has a wide range of solutions specifically designed to provide efficient installation, deployment and replacement that ultimately help schools complete new and retrofit projects faster while reducing overall costs.



- Pre-connectorized wiring devices
- Plug-n-play AV assemblies
- Pre-wired raceway systems







## **Energy Efficiency**

Modern education facilities incorporate new technologies such as energy efficient lighting controls, reducing energy consumption and costs.

- Wired and wireless ceiling and wall-mount occupancy sensors
- Daylight harvesting sensors
- Data center airflow
   management solutions

## **Safety and Durability**

Students and personnel need to be protected from the hazards of electricity, while secondary educational facilities may encounter intentional or unintentional damage. To reduce risk, solutions need to provide reliable safety, protection and durability.



- Impact and tamper-resistant solutions
- GFCI, isolated ground and surge protection devices
- Weatherproof, watertight and locking devices



## **Universities and Continuing Education Facilities**





### **Power, Data and Audio/Video Delivery** At the university level, advanced high-speed

technology is broadening access through online courses, facilitating research, improving administrative operations, and attracting and retaining students.



- High-speed copper and fiber network solutions
- Advanced data center and cable management solutions
- Multimedia and audio/video systems

## Installation Efficiency

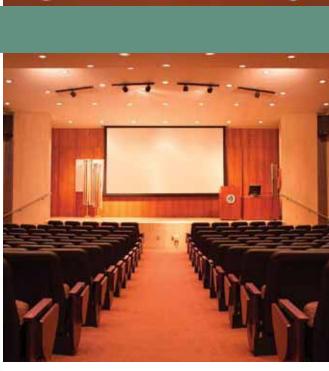
With solutions that offer fast, efficient installation of power, data and AV connections, Hubbell enables today's college and university facility departments to maximize investments in building infrastructure during new and retrofit construction projects.



- Pre-fabricated, pre-terminated wiring solutions
- Pre-wired metallic raceway
- Plug-n-play data center solutions







## **Energy Efficiency**

Many colleges and universities are striving for maximum energy savings and sustainability, as evidenced by the growing number of institutions acquiring various levels of LEED certification under the U.S. Green Building Council.



- Occupancy and daylight harvesting sensors
- Electric vehicle charging stations
- Data center space savings and airflow management

## **Safety and Durability**

Residence halls and public spaces require solutions that prevent electrical shock and trip hazards, while harsh outdoor stadium environments, food service, and medical and science facilities require durable, reliable devices.



- Harsh environment and watertight devices
- Surge protection and motor disconnects
- Safe temporary power solutions



## **Classrooms and Learning Spaces**



Class Rooms • Libraries • Lecture Halls • Computer Labs • Restrooms



Today's classroom offers a new type of learning environment with educators using state-of-the-art smartboards, video conferencing, and multimedia technologies to engage students. At the same time, these frequently-used spaces require solutions that enable fast, efficient installations and provide cost-effective, safe learning environments for educators and students.

## Power, Data and Audio/Video Delivery

Classrooms and learning spaces require comprehensive wall, ceiling and in-floor solutions that deliver power, data and AV to a variety of technology devices and equipment.

## Installation Efficiency

When it comes to upgrading or installing new devices in classrooms, contractors and maintenance personnel need to get in and out of these spaces as quickly and efficiently as possible.

## Hubbell X-END AV Plug-n-Play System

- Four inch connector tail
- Swap out application patch cords and tails utilizing the same horizontal cable



AV Plug-n-Play X-END Horizontal Cable Runs, Male, Black Description Catalog No.

Non-plenum, 8-pin Plenum, 8-pin Non-plenum, 8-pin, with 3.5mm Plenum, 8-pin, with 3.5mm VGA6xxBK VGA6PxxBK VGA36xxBK VGA36PxxBK VGA36PxxBK



xx = Length: **15** (15 ft), **25** (25 ft), **35** (35 ft), **50** (50 ft), **75** (75 ft), and **100** (100 ft) Contact Hubbell customer service for custom lengths, minimum quantities and lead times may apply.

VGA Plug-n-Play X-END Connection	is				- 5	
		15-Pin (F) 1	to 8-Pin (F)		15-Pin (M) to	8-Pin (M) 8" Tail
Quantity	Straight 180°	Angled 45°	Angled 90°	8" Tail	Non-Plenum	Plenum
1-Pack	15S6P1	15A6P1	15N6P1	15T6P1	15M6P1	15MP6P1
10-Pack	15S6P10	15A6P10	15N6P10	15T6P10	15M6P10	15MP6P10

> B



www.hubbell-wiring.com

## **Classrooms and Learning Spaces**

## **Data and Audio/Video Connectivity**

Hubbell's netSELECT<sup>®</sup> FPTV connection enclosure delivers high-density connectivity and power in the wall. In-wall connections allow flat panel displays and interactive smartboards to sit flush without dangling cords. It quickly installs to studs or sheetrock without additional components or hardware.

Power Kits

Standard power kit, white

Surge protected power kit, blue



### FPTV Connection Enclosure

2-gang in-wall enclosure, white NSA Steel cover for NSAV6 series, white NSA

NSAV62M NSAV6C

.

#### Hubbell iSTATION HDMI 110 UTP Extenders

110 UTP HDMI extender (pair),	Decorator	ISFH110xx
5 Volt DC, 2 4-pair	Module	IMH1102xx
xx = Color: BK (Black), El (Electric Ivon	y), <b>GY</b> (Gray),	
OW (Office White), and W (White).		

## **Energy Efficiency**

Lighting classrooms consumes a substantial amount of the education budget. However, significant savings can be realized by turning off lights when they are not needed. Occupancy sensors provide an inexpensive way to guarantee that energy waste is kept to a minimum.

#### H-MOSS<sup>®</sup> Ceiling Sensors

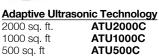
Adaptive Dual Technology



2000 sq. ft.

1000 sq. ft







## 500 sq. ft ATD500C All ceiling sensors must use a control unit.

ATD2000C

ATD1000C

#### **Control Unit**

120/277V AC, 50/60 Hz for use with ATD, ATUCU300Aand ATP series ceiling/wall mount sensorsCU300ASame as CU300A above, manufactured in U.S.A.CU300A



## **Power and Multimedia Delivery**

The AV Ceiling Enclosure is designed to work with active AV devices to integrate AV distribution, data connections and power in one location, providing a direct connection to a projector or a display device.

#### AV Ceiling Enclosure

White enclosure 24"x12"x 8", 2-20 Amp	Non-Plenum	AVCE1
duplex receptacles & 2-gang back box	Plenum Rated	AVCE1P
Data Kit		AVCE1KIT

#### **Non-Metallic Raceway**

Hom motunio	nuocituy			
Two channel rad	ceway. 5 ft., 7 ft.	or 10 ft. lengths.		
Description	5 ft.	7 ft.	10 ft.	
Base & Cover	PW2BC5	PW2BC7	_	
With Adhesive	PW2ABC5	PW2ABC7	-	
Base	PB2B5	_	PB2B10	
Cover	PB2C5	_	PB2C10	
Split Cover	PB2SPL5	-	PB2SPL10	
For full offering of D	acowaya and fitting	plaga vieit our oplin	o optalog	_

For full offering of Raceways and fittings, please visit our online catalog.

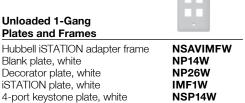


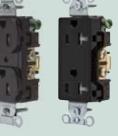
PW2

PR2

. 4.50" . (114.30)







**Additional Products** 

of Interest

## Tamper-Resistant Receptacles

Hubbell offers a variety of tamper-resistant receptacles that comply with NEC requirements that all 15A and 20A 125V receptacles shall be "tamper-resistant" in child care facilities and residencies.



### RE-BOX<sup>®</sup> Remote Equipment Cabinet

RE-BOX<sup>®</sup> provides an efficient and organized enclosure to house patch panels and active equipment in classrooms to a remote telecom room.



## HDMI 110 UTP Extenders

Designed to provide aestheticallypleasing access to video and audio, the 110 style connections transport 1080p video and flawless audio.



## **Administration Offices**



## Administration offices have similar technology needs to classrooms, but are more focused on ensuring maximum productivity. Faculty and staff are using technology to improve communication, productivity and organizational development. These spaces also strive to conserve energy and are designed to be more aesthetically pleasing while offering a modern, more productive working environment for staff.

## **Energy Efficiency**

Energy saving H-MOSS® wall switches automatically turn off lights in vacant offices and conference rooms to reduce energy consumption while electrical charging stations support innovative hybrid and electric vehicles on campus.

## Power, Data and Audio/Video Delivery

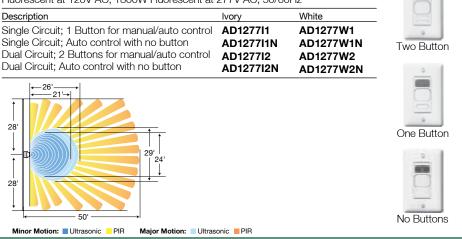
Reliable surge strips and receptacles keep equipment up and running while the delivery of power and data supports the proliferation of computers, access to systems and information, and enhanced communication.

## H-MOSS<sup>®</sup> Wall Switches



#### Dual (Ultrasonic and Passive Infrared)

1000 square foot coverage with photocell, 800W Incandescent, 1000W Fluorescent at 120V AC, 1800W Fluorescent at 277V AC, 50/60Hz



HUBBELL Wiring Systems

## **Administration Offices**

## **Power and Multimedia Delivery**

Hubbell SystemOne features a unique universal cover assembly and a wide variety of application sub-plates that install on Hubbell SystemOne fire-rated poke-thoughs and floor boxes. Hubbell SystemOne delivers a consistent, aesthetic and functional solution for applications in the floor or through the floor.

Subplates Style Line® Decorator/

openings

or AV

Covers

coat finish

Cast aluminum

construction with

a durable powder

GFCI for power and/or AV (4) 20A and (4) keystone

StyleLine® Decorator/

Duplex for power and/

S1SP

S1SP4X4

S1SPDUSL

Carpet S1CFCxx

S1TFCxx

IM1K1xx

IM2K1xx

IM1SCA15xx

IM2SCA2xx

IMBDS1xx

IMBDSA15xx

IMB153X2xx

Tile

 $\mathbf{x}\mathbf{x} = \text{Color/Finish} \cdot \mathbf{AI}$  (Aluminum Finish)

BRS (Brass Finish), BL (Black) and GY (Gray)

#### Hubbell SystemOne



#### Fire-Rated Poke-Throughs

 Description
 Assembled Units\*
 Through Floor Fittings

 (4) 20A; (4) keystone
 S1PT4X4xx
 S1PT4X4FIT

 Dual Style Line
 S1PTxx
 S1PTFIT

 Modular AV
 S1PT3IMxx
 S1PTAVFIT

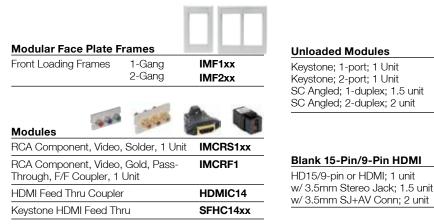
 Furniture Feed
 S1PTFxx

\*Factory assembled units include through floor fitting, cover and sub-plate.

For full offering of SystemOne sub-plates and accessories, please visit our online catalog.

## **AV Connections**

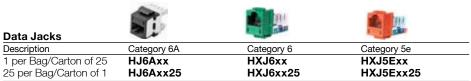
Hubbell iSTATION products provide a consistent and practical solution for delivering all types of connections where you need them - in the wall, floor or table. Hubbell iSTATION's modular design allows users to custom configure plate solutions to their requirements.



xx = Color: AL (Almond), BK (Black), EI (Ivory), GY (Gray), OW (Office White) and W (White).

## **Data and Audio/Video Connectivity**

Hubbell's category rated modular jacks and patch cords provide leading edge performance and innovative designs to support today's Ethernet protocols, IP devices and high bandwidth audio video applications.



xx = Color: AL (Almond), B (Blue), BK (Black), EI (Electric Ivory), GL (Gold), GY (Gray), GN (Green), LA (Light Almond), OW (Office White), OR (Orange), P (Purple), R (Red), TI (Telco Ivory), W (White) and Y (Yellow).

		-	
Patch Cords			
Description	Category 6A	Category 6	Category 5e
	НС6Аххуу	HC6xxyy	HC5Exxyy
<b>xx</b> - Color: <b>B</b> (Blue) <b>B</b>	(Black) GY (Grav) GN (Green	OR (Orange) P (Purple)	R (Red) W (M/hite) and Y (Yellow)

xx = Color: **B** (Blue), **BK** (Black), **GY** (Gray), **GN** (Green), **OR** (Orange), **P** (Purple), **R** (Red), **W** (White) and **Y** (Yellow). yy = Standard Length: **01** (1ft), **03** (3ft), **05** (5ft), **07** (7ft), **10** (10ft), **15** (15ft), **20** (20ft).

## Additional Products of Interest



## SystemOne Recessed 6" and 8" Fire-Rated Poke-Throughs

Designed to handle today's increasing data and AV requirements while providing the highest quality finish with greater durability than paint. Available in the following plated finishes: brass, nickel & oil rubbed bronze, recessed SystemOne products are easily installed with a standard 6 or 8 inch core hole, or with our available pre-pour tubes.

## Commercial Electric Vehicle Charging Stations (EVSE)



With the number of electric vehicles rapidly increasing, today's municipalities need to ensure they're making the right choice when it comes to charging stations. Today's charging stations must offer costeffective installation, superior reliability, safety and ease of use, while also blending nicely into the surrounding environment for a more stylish, attractive appearance.



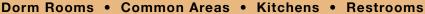
### Hubbell Surge Protective Devices (SPDs)

A cascading approach is encouraged for optimal protection that includes surge protection at the service entrance, branch panel and the point-of-use. Hubbell offers a comprehensive offering of panel surge products, innovative surge strips, and the broadest surge receptacle offering in the industry.



## **Residence Halls**







With more information, classes and entertainment being delivered online, technology has become an integral component of student life. In fact, advanced technology is one of the most vital components for continuing educational facilities to attract students. At the same time, safe living environments are paramount to protecting students and reducing risk.

### Power, Data and Audio/Video Delivery

Hubbell's wide range of voice, data and video connectors and plates are ideal for delivering internet access, entertainment, phone service and security systems to residence halls.

## Safety and Durability

Frequent plugging in of electronics in these spaces requires durable wiring devices, while bathrooms, kitchenettes and other potentially damp areas need tamper and weather resistant GFCI receptacles to ensure protection of students.

## **Tamper-Resistant GFCI Receptacles**



The combination of GFCI protection and tamper-resistant safety provides and ideal "one-stop" Hubbell solution. Hubbell tamper-resistant GFCI devices also include a weather resistant rating per NEC<sup>®</sup> 406.8, providing UV and corrosion resistance.

Circuit Guard <sup>®</sup> GFCI Re Tamper-Resistant, Wea	•	U 15A 125V NEMA 5-15R	20A 125V NEMA 5-20R	
Description	Color	15A 120 V AC	20A 125V AC	2. 7
Flush, nylon face, back and side wired, multiple drive screws, automatic grounding clip	Almond Black Brown Gray Ivory Light Almond Office White Red White	GFTR15AL GFTR15BK GFTR15 GFTR15GY GFTR15I GFTR15LA GFTR15DW GFTR15R GFTR15W	GFTR20AL GFTR20BK GFTR20 GFTR20GY GFTR20I GFTR20LA GFTR20OW GFTR20R GFTR20W	



## **Residence Halls**

## Installation Efficency

Hubbell's SNAPConnect receptacles make installation fast, easy and consistent so you can complete projects sooner - saving more than three minutes per device!



xx = Color: AL (Almond), No Suffix (Brown), GY (Gray), LA (Light Almond) and R (Red).

### **Energy Efficiency**

Significant savings can be realized by turning off lights when they are not needed. Occupancy sensors provide an inexpensive way to guarantee that energy waste is kept to a minimum.

Control Units

### Adaptive Passive Infrared Technology

Wall Switches		
1-Circuit, 1-button	AP1277xx1	-
1-Circuit, no button	AP1277xx1N	-
2-Circuit, 2-buttons	AP1277xx2	
1-Circuit, no button	AP1277xx2N	-
	11 A	-

### **Ceiling Sensors**

1500 sq. ft.	ATP1500C
450 sq. ft.	ATP600C

#### Wall Mount Sensors

ATP1600W 1600 sq. ft.

Ceiling and wall mount sensors must use a control unit.

## **Data and Audio/Video Connectivity**

120/277V AC, 50/60 Hz for	CU300A
use with ATP series ceiling/wall	
mount sensors	
Same as CU300A above,	CU300AU
manufactured in U.S.A.	

Accessories Ceiling	
Infrared NEMA 4X Enclosure	ACIPE
Ceiling Mount Wire Guard	ACMG
Raceway Adapter	ACMRA
Wall Mount and Switch	
Wall Switch Wire Guard	AWSG
Wall Mount Wire Guard	AWMG

#### surveillance systems, VCR/DVD applications. F-Type Connectors F-Type Coupler F-Type Coupler F-Type to RCA F-Type Bulkhead F/F Bulkhead F/F Gold Bulkhead F/F Gold Recessed SFGRFxx SFFxxX SFFGxx SFRFGxx xx = Color: AL (Almond), BK (Black), GY (Gray), El (Ivory) LA (Light Almond), OW (Office White) or W (White) SFRFG Series not available in Almond or Light Almond. SFGRF Series not available in Light Almond.

Requiring no solderin, these connectors install with a snap and provide quick, easy "screw-on" termination.

Compatible with TV, CATV and CCTV, home theater and entertainment systems, satellite, security and

	•	:	Ξ		::		
IFP Faceplates		Si	ngle Gang			Double Gar	Ig
Delivery	1-Port	2-Port	3-Port	4-Port	6-Port	9-Port	12-Port
1/bag, Carton/25	IFP11xx	IFP12xx	IFP13xx	IFP14xx	_	_	_
1/bag, Carton/10	-	_	_	_	IFP26xx	IFP29xx	IFP212xx
xx = Color: AL (Almond), BK (Black), El (Electric Ivory), GY (Gray), LA (Light Almond), OW (Office White) or W (White).							

## **Additional Products** of Interest

(h) (f)

SNAP1RA

SNAP2RA



#### SNAPConnect® Switches

Hubbell SNAPConnect® Switches offer a modular design that improves installation efficiency and simplifies change-outs. Available in 15A and 20A, single-pole and three way devices.



#### Wireless Sensors

Start saving immediately with Hubbell's new wireless lighting controls. They require no additional wiring and install quickly perfect for rapidly changing environments or areas with difficult access.



#### SpikeShield<sup>®</sup> Surge Strips

Hubbell SpikeShield surge protective devices feature a wide range of products to handle every application or need. A good-better-best approach to surge protection levels offers products at every price point; this allows customers to choose the proper protection level for their application.



## **Food and General Services**

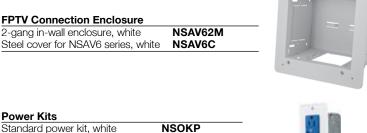


Cafeterias • Kitchens • Book Stores • Student Lounge



### Flat Panel TV Enclosures

Hubbell's netSELECT<sup>®</sup> FPTV in-wall connection enclosure allows flat panel displays and interactive smartboards to sit flush without dangling cords. It quickly installs to studs or sheetrock without additional components or hardware.



Standard power kit, white **NSOKP** Surge protected power kit, blue **NSOKPS**  Both primary and continuing education facilities include food preparation areas, requiring easy-to-use, safe and durable power connections that accommodate a variety of appliances. Today's education facilities also strive to deliver advanced technology to food service areas for Internet access, digital signage for displaying menus, entertainment systems, and point-of-sale registers.

### Safety and Durability

Hubbell offers an array of ground fault and watertight devices that are ideal for use in kitchen and food service areas, as well as disconnect switches to safely shut-down larger machinery like dishwashers and exhaust systems.

## Power, Data and Audio/Video Delivery

Flat panel TV enclosures are ideal for keeping cords hidden behind digital signage systems in cafeterias while HI-Impact enclosures protect equipment needed to deliver power, data and multimedia.



www.hubbell-wiring.com

## **Food and General Services**

## **Power Connections**

Large equipment like back-up generators, compactors, loading dock equipment, HVAC units and air handlers all need high-capacity, safe and reliable power. These enclosures are non-metallic Type 4X Rated for washdown.

**Circuit-Lock®** 

A600 pilot duty

A600 pilot duty

30A disconnect switch

60A disconnect switch

\*Class "J" fuses not included.

Description

Fused Disconnect Switches

Auxiliary contacts, normally open,

Auxiliary contacts, normally closed,

30A Units supplied with (2) 1 in. N.P.T. raintight conduit fittings.

60A Units supplied with (2) 11/4 in. N.P.T. raintight conduit fittings.



Circuit-Lock <sup>®</sup> Unfused Disconnect Switches	6
Description	Catalog No.
30A disconnect switch	HBLDS3*
60A disconnect switch	HBLDS6*
100A disconnect switch	HBLDS10*
Auxiliary contacts, "break after main break"1 set of n/o & n/c contacts	HBLAC1
Auxiliary contacts, "break before main break"1 set of n/o contacts	HBLAC2
*Add suffix "AC" for disconnect with one HBLAC	1 aux contact

"Add suffix "AC" for disconnect with one HBLAC1 aux. contact.

## **Power and Multimedia Delivery**

Hubbell's HI-Impact enclosures are available in NEMA 3R, 4, 4X, 12 and 13 ratings, providing a mini telecom room for harsh environments.

#### **User-Configurable Version**

	Height	
Description 24" (61	0) 36" (914.4)	48" (1219.2)
Cold Rolled Steel, Gray Powder Coat, NEMA 3R IR2U:	BRG IR3U3R0	G —
Cold Rolled Steel, Gray Powder Coat, NEMA 4/12/13 IR2U	G IR3UG	IR4UG
Stainless Steel, Brushed, Unpainted, NEMA 4X IR2US	SS IR3USS	_
Pre-Configured Version		
Pre-Configured Version		Height
Pre-Configured Version		- 5
<b>X</b>	36" (914.4) IR3PG	- 5
Description	IR3PG	48" (1219.2)



Catalog No.

FDS30\*

FDS60\*

ACFSNO

ACFSNC

## Watertight Devices When it comes to safety, most everyone knows that water and electricity can

create a dangerous environment. Ensuring a watertight seal for electrical devices is critical to ensuring maximum safety of personnel in any wet environment. Hubbell Watertight Twist-Lock® devices have become the industry standard for maintaining a watertight seal.

**Additional Products** 

of Interest

## HI-Impact<sup>™</sup> Copper Connectors HI-Impact connectors provide a rugged,

durable IP67 Rated connection in a standard configuration for Hubbell Category 6 and 5e rated connectivity.

## **Power Connections**

Watertight Safety-Shroud® Twist-Lock® devices are constructed of highly impact-resistant thermoplastic for a UL Type 4X rating in heavy duty environments. The integral Safety-Shroud virtually eliminates bent and broken plug blades, leading to longer equipment life while providing extra protection for personnel.

### Watertight Safety-Shroud® Twist-Lock®

water light balety-bin bud Twist-Ebox							
	NEMA Rating Color C	oded by Voltage	Poles/Wires	Plug	Connector	Receptacles	and the
	20A 125V	L5-20	2P/3W	HBL2311SW	HBL2313SW	HBL2310SW	E
	20A 250V	L6-20	2P/3W	HBL2321SW	HBL2323SW	HBL2320SW	0
	20A 277V AC	( L7-20	2P/3W	HBL2331SW	HBL2333SW	HBL2330SW	
	20A 3Ø 250V	x L15-20	3P/4W	HBL2421SW	HBL2423SW	HBL2420SW	
	30A 3Ø 250V AC	x L15-30	3P/4W	HBL2721SW	HBL2723SW	HBL2720SW	E
	30A 3Ø 480V AC		3P/4W	HBL2731SW	HBL2733SW	HBL2730SW	2.5



Stainless Steel Data Plates Stainless steel plates are designed for flush mounting of Hubbell connectivity providing corrosion resistance from frequent washdown.



www.hubbell-premise.com

## **Auditorium and Performing Arts**





## **Twist-Lock® Devices**

Insulgrip® Twist-Lock® devices available in 20A and 30A maintain Hubbell's classic integrity, solid construction and safety features that make these the "Industry Standard". The plug and connector feature a powerful cord grip, and nylon body and housing for impact resistance.



HUBBELL

Viring Systems

### Twist-Lock<sup>®</sup> Locking Devices

IWIST-LOCK®	Locking Devices				
NEMA Rating Co	olor Coded by Voltage	Poles/Wires	Plug	Connector	Receptacle
15A 125V	L5-15	2P/3W	HBL4720C	HBL4729C	HBL4710
20A 125V	(Ja) L5-20	2P/3W	HBL2311	HBL2313	HBL2310
20A 250V	(L6-20	2P/3W	HBL2321	HBL2323	HBL2320
20A 3Ø 250V	(L15-20	3P/4W	HBL2421	HBL2423	HBL2420
20A 3Ø 480V	(1) L16-20	3P/4W	HBL2431	HBL2433	HBL2430
30A 3Ø 250V	(1) L15-30	3P/4W	HBL2721	HBL2723	HBL2720
30A 3Ø 480V	( <u>,</u> ) L16-30	3P/4W	HBL2731	HBL2733	HBL2730



Education facilities typically include auditoriums and performing arts centers for a variety of learning and entertainment activities including band performances, plays and general assemblies, or large-scale seminars, theatre productions and award ceremonies. These spaces must accommodate the latest audio-visual technology for presentations while providing maximum reliability to ensure that the show goes on.

## Power, Data and Audio/Video Delivery

From access to multimedia applications at the presenter's podium on stage, to projection, lighting, curtain and sound systems, these spaces require a variety of power and low-voltage systems.

### Safety and Durability

Twist-Lock<sup>®</sup> devices and single-pole plugs maintain reliable power connections to prevent performance interruptions while wire mesh grips and cable protection systems maintain the integrity of electrical cords, cables and conduit.

## **Auditorium and Performing Arts**

## **Safety and Security**

Single pole devices are the right choice for supplying temporary electrical power distribution to numerous applications. Single pole devices have been designed with ease of assembly and disassembly in mind, no special tools are required.

Single Pole Plugs Thermoplastic elastomer	and the second	and a second	Single Pole "T's" and Tri
Description	Male	Female	Tapping "T" (F
300 Amp, cable sizes #4 - 2/0	HBL300Mxx	HBL300Fxx	Paralleling "T"
400 Amp, cable sizes 2/0 - 4/0	HBL400Mxx	HBL400Fxx	Tri-Tap (M-F-F
	1	1	Tri-Tap (F-M-N
			Single Pole
Single Pole Receptacles	Through Hole Mo	ounting	Distribution
Thermoplastic elastomer	Female	Male	1 Male, 6 Fem
400 Amp Panel Mount, mates	HBLFRSxx	HBLMRSxx	

xx = Color: BK (Black), BL (Blue), BN (Brown), GN (Green), O (Orange), R (Red), W (White) and Y (Yellow).

## **Data/Audio Wall Mount Enclosure**

QUADCAB® wall mount enclosures are an ideal solution for remote audio/video and data applications.

#### QUADCAB<sup>®</sup> Wall Mount Enclosure

with 300 and 400 Amp plugs.

Contents: (1) Rear section (arrives disassembled facilitating installation)

- (1) Front door; (2) 19" mounting angles; (1) Center section with
- (2) CH751 locks; (2) Top/bottom cover plates; (2) Hinge pins;

(4	<ol> <li>Security c</li> </ol>	cotter pir	IS			
		Rack	Rear W	Vall		
Height	Depth	Units	Unit	Color*	Window Door	Solid Door
24" (609)	20" (508)	12	2	Black	HSQ24	HSQ24S
24" (609)	26" (660)	12	2	Black	HSQ2426	HSQ24S26
24" (609)	36" (914)	12	2	Black	HSQ2436	HSQ24S36
36" (914)	20" (508)	19	4	Black	HSQ36	HSQ36S
36" (914)	26" (660)	19	4	Black	HSQ3626	HSQ36S26
36" (914)	36" (914)	19	4	Black	HSQ3636	HSQ36S36
48" (1219)	20" (508)	26	6	Black	HSQ48	HSQ48S
48" (1219)	26" (660)	26	6	Black	HSQ4826	HSQ48S26
48" (1219)	36" (914)	26	6	Black	HSQ4836	HSQ48S36

\*For Office White, add "W" to the end of the Catalog No.

## Wire Securedness and Strain Relief

Hubbell wire mesh grips are designed to prevent strain from being transmitted to joints and terminals on electrical cords, cables and conduit. This provides greater security than using a fitting alone, making electrical systems safer by preventing cable pull-out and controlling cable arc-of-bend.

#### Kellems® Grips

### Single Eye, Closed Mesh\*\*

For permanent support when cable end is available to be

installed through grip.		200
Cable Diameter	Approx. Breaking	
Range Inches (cm)	Strength Lb. (N)	Catalog No.
.50"62" (1.27-1.57)	530 (2,357)	02201013
.63"74" (1.60-1.88)	790 (3,514)	02201014
.75"99" (1.90-2.51)	1,020 (4,537)	02201015
1.00"-1.24" (2.54-3.15)	1,610 (7,161)	02201017
1.25"-1.49" (3.17-3.78)	1,610 (7,161)	02201018
1.50"-1.74" (3.81-4.42)	1,610 (7,161)	02201019

\*\*Change catalog number from **022** to **024** for stainless steel. Consult factory for availability.

Rod Closing**		*
For support when cable		展
end is not available.		额
Cable Diameter	Approx. Breaking	
Range Inches (cm)	Strength Lb. (N)	Catalog No.
.50"62" (1.27-1.57)	790 (3,514)	02203013
.63"74" (1.60-1.88)	790 (3,514)	02203014
.75"99" (1.90-2.51)	1,020 (4,537)	02203015
1.00"-1.24" (2.54-3.15)	1,610 (7,161)	02203017
1.25"-1.49" (3.17-3.78)	1,610 (7,161)	02203018
1.50"-1.74" (3.81-4.42)	1,610 (7,161)	02203019
**Change catalog number fr	rom 022 to 024 for s	stainless

steel. Consult factory for availability.

Single Eye, Split Mesh,









#### **Pro-Audio**

Hubbell's pro-audio connectors including XLR, quarter inch, SPEAKON®, data USB and 1394. Type S connectors mate with Hubbell iSTATION modules allowing each device to mount into Hubbell delivery, workstation and panel solutions.



#### High Amp Straight Blade

Hubbell offers a complete line of heavy duty 30, 50 and 60 Amp devices. Captive Allen head terminal screws permit high torque and clamping pressure required for larger size conductors used in copier, range and dryer applications.



**IEC Pin & Sleeve** Provide safe and dependable performance in the most demanding environments. Heavy duty nonconductive nylon construction provides impact and corrosion protection. Pin & Sleeve devices are available in 20A 600V to 100A 600V.



## **Science and Research Laboratories**



Computer Labs • Science Labs • Research Labs



Whether it's the typical highschool science lab, or a more sophisticated university research facility, science and research laboratories require an array of solutions to deliver power and technology where it's needed. These spaces can also be exposed to corrosive chemicals and wash downs, requiring extremely durable product solutions designed to withstand harsh environments.

## Power, Data and Audio/Video Delivery

Hubbell's complete line of metal and non-metallic raceway is optimal for delivering power and technology to the point of use in laboratories while offering maximum flexibility for changing needs.

### Safety and Durability

Hubbell's complete line of GFCI and duplex receptacles maintain reliable power and safety in harsh laboratory environments, while stainless steel plates resist oxidation and corrosion.

### **Pre-Wired Raceway Systems**



- Hubbell Pre-Wired Raceway saves time and money by completing the job quicker and on schedule
- Local and factory support available to assist in defining bills of material
- Raceway ducts are kitted, labeled and shipped by room, area or floor locations

Aluminum Pre-V Satin Anodized Finish	
Description	Dimension*
HBLALU3800 Series	A: 2.25" (57.15)
Single Channel	B: 3.00" (76.20)
HBLALU4800 Series	A: 2.25" (57.15)
Two Channel	B: 6.00" (152.40)
HBLALU5000 Series	A: 1.75" (44.45)
Two Channel	B: 5.08" (129.03)
HBLALU7620 Series	A: 2.25" (57.15)
Three Channel	B: 7.62" (193.55)

### Non-Metallic Pre-Wired Raceway

Office white Color	
Description	Dimension*
PB2 BaseTrak <sup>®</sup> Series	A: 1.63" (41.40)
Single Channel	B: 4.50" (114.30)
PS3 Super BaseTrak <sup>®</sup> Series,	A: 1.97" (50.04)
Three Channel	B: 6.70" (170.18)

## Steel Pre-Wired Raceway

Ivory or Gray Finish	
Description	Dimension*
HBL3000 Series	A: 1.53" (38.86)
Single Channel	B: 2.75" (69.85)
HBL4750 Series	A: 1.75" (44.45)
Single or Two Channel	B: 4.75" (120.65)
(with Divider)	
HBL6750 Series	A: 2.22" (56.39)
Two Channel	B: 6.75" (171.45)
(w/1 divider)	
Three Channel	
(w/2 dividers)	





## **Science and Research Laboratories**

## **Safety and Security**

Hubbell's top-of-the-line Ground Fault receptacles are available with or without Hubbell's patented Self Test technology which requires no user interface to test the device. Both versions feature Hubbell's exclusive tamper-resistant design. The Hubbell TR design employs an electro-mechanical switching mechanism to obtain the tamper-resistant safety feature.

GFCI Receptacles		
Color	15A 125V	20A 125V
Black Brown Gray Ivory Red White	GFR5262SGBK GFR5262SG GFR5262SGGY GFR5262SGI GFR5262SGR GFR5262SGW	GFR5362SGBK GFR5362SG GFR5362SGGY GFR5362SGI GFR5362SGR GFR5362SGR GFR5362SGW
ceptacles		
Color	15A 125V	20A 125V
Black Brown Gray Ivory Red White	GFR5262BKTR GFR5262TR GFR5262GYTR GFR5262ITR GFR5262RTR GFR5262WTR	GFR5362BKTR GFR5362TR GFR5362GYTR GFR5362ITR GFR5362RTR GFR5362RTR GFR5362WTR
	Black Brown Gray Ivory Red White Color Black Brown Gray Ivory Red	GFCI Receptacles Color 15A 125V Black GFR5262SGBK Brown GFR5262SGGY Nory GFR5262SGGY Nory GFR5262SGI Red GFR5262SGR White GFR5262SGR White GFR5262SGR Color 15A 125V Black GFR5262BKTR Brown GFR5262BKTR Brown GFR5262BKTR Gray GFR5262ITR Gray GFR5262ITR Red GFR5262TR

## **Data and Audio/Video Connectivity**

Hubbell's Surface Mount Boxes are designed to facilitate today's most demanding workstation needs. Available in five sizes to accommodate 1, 2, 4, 6 and 12 Hubbell jacks and Audio/Video connectors, each box encompasses the right combinations of features and density for UTP, audio, video and fiber optic applications.



Non-Metallic Raceway

PL1 LANTrak (Latching)

PW2 WallTrak (Latching)

xx = Length: 5 (5 ft) or 7 (7 ft).

PB2 BaseTrak Base

PB2 BaseTrak Cover

PP1 PremiseTrak (Latching)

w/o Adhesive

PP1BCxx

PL1BCxx

PW1BCxx

PB2Bxx

PB2Cxx

with Adhesive

PP1ABCxx

PL1ABCxx

PW1ABCxx

xx = Color: BK (Black), El (Electric Ivory), GY (Gray), OW (Office White) and W (White).

#### POLYTRAK® Raceway Compatibility Chart

Series	PP	PL	PW	PB
ISB1	1	1	1	✓*
ISB2	1	1	1	✓*
ISB4	1	1	1	✓*
ISB6	1	_	_	✓*
ISB12	1	_	_	✓*

\*Use #PB3REDA transition fitting.

### **Power Connections**

Hubbell Extra Heavy Duty Industrial Series receptacles demonstrate a commitment to building quality devices and continually reinforce a philosophy of unrivaled performance. The deep nylon body design delivers increased impact resistance and the exclusive bypass contact design results in greater contact force and reduced heat build up.

	xtra Heavy ial Series	, Duty		A PARTY OF THE PAR		
NEMA	Rating	Color	Duplex	Weather Resistant	Single	
UG	15A 125V	Brown	HBL5262	HBL5262WR	HBL5261	
( [] []w)		Black	HBL5262BK	HBL5262BKWR	HBL5261BK	
		lvory	HBL52621	HBL5262IWR	HBL52611	
		Other	HBL5262x	HBL5262xWR	-	
<b>D</b> G	20A 125V	Brown	HBL5362	HBL5362WR	HBL5361	
( 0 [bw)		Black	HBL5362BK	HBL5362BKWR	HBL5361BK	
$\smile$		lvory	HBL5362I	HBL5362IWR	HBL53611	
		Other	HBL5362x	HBL5362xWR	HBL5361xx	

x = Color: GY (Gray), R (Red) and W (White). xx = Color: GRY (Gray), and W (White).

## Additional Products of Interest



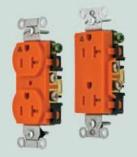
## Cat 6A UTP and Shielded Jacks

Hubbell Category 6A component compliant UTP/FTP jacks provide significant bandwidth to support 10GbE, PoE and other emerging applications. Shielded versions provide enhanced EMI/ANEXT protection.



**Stainless Steel Wallplates** 

Hubbell's corrosion resistant, stainless steel wallplates provides solutions for a variety of applications with environments subjected to heavy abuse. Stainless steel wallplates are available in a variety of power and data configurations.



### **Isolated Ground Receptacles**

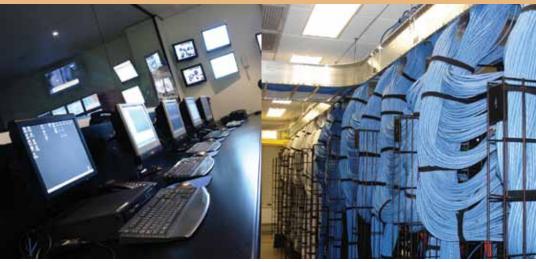
Isolated ground devices provide protection for sensitive electronics and test equipment in areas with high levels of network connectivity.



## **Data Centers**



Data Centers • Racks • Data Closets • Communication Rooms



Data centers are the very core of education facilities, supporting all the applications needed for daily communications and Internet access, management and storage of administration and student records, and the delivery of advanced learning technologies. These spaces house a wide range of highly critical networking equipment, yet are also faced with increased power consumption and cooling challenges.

## Power, Data and Audio/Video Delivery

From efficient power distribution and network cable management, to advanced copper and fiber cable and connectivity, Hubbell has the solutions to support the latest high-density networking applications.

## **Energy Efficiency**

Hubbell cabinets and cable management optimize airflow for more efficient cooling and reduced energy consumption while pre-terminated solutions save space and reduce waste.

## XXL Organizers Vertical Cable Management



• The hinged door is designed to open left, right or swing out of the way

- Mounting plates for power strips on the rear of the organizer
- Cable management spools ensure proper bend radius, and are vertically placed where needed along the channel



#### XXL Series Vertical Organizers

		<u></u>		
Door	Channel			
Insert	Depth*	6" Wide	10" Wide	15" Wide
Silver	14 1/8"	XS0610	XS1010	XS1510
Silver	18 7/8"	XS0615	XS1515	XS1515
Black	14 1/8"	XS0610BK	XS1010BK	XS1510BK
Black	18 7/8"	XS0615BK	XS1515BK	XS1515BK
1.01	1 1 11 1			

\*Channel depth does not include rear cable organizer. Rear cable organizer depth is 7%." Contents: Front and rear vertical organizer, door, 16 - 3" black cable management spools.

#### NEXTFRAME® 3" and 6" Equipment Racks





www.hubbell-wiring.com

## Data Centers

## Cable Management

Efficiency

Black

Gray

10G-0M3

electrical tracking.

20A and 30A Plug,

Rating Color Coded

by Voltage

20A

120/240V

20A

3Ø 480V

30A

120/240V

30A

30 480

30A

3Ø 600V

**Connector, Receptacle** 

PROclick<sup>®</sup> Connectors

12 LC 10G – OM3 Multimode

12 SC 10G – OM3 Multimode

High Density 144-Port 1U Enclosure

Ultra Compact 12-Port LC Cassette

Poles/Wires

3P/4W

3P/4W

3P/4W

3P/4W

3P/4W

xx = Device: P (Plug), C (Connector) and R (Receptacle).

**Power Connections** 

Hubbell Premise Wiring offers a full line of networking enclosures featuring enhanced cable management. Security features include locking split side doors.

H2 Series Network Cabinets		1. Carlos	COLORADO POR	an and a second s
Height         Depth         Color         Units         Catalog No.           84.00"         36.00"         Black         45         H2N8436           84.00"         32.00"         Black         45         H2N8432           80.00"         36.00"         Black         43         H2N8036           80.00"         32.00"         Black         43         H2N8032	Ú	Angled Pane Category 6A Shielded 6A 6 5e	24 Port HP6A24AU PSJ24AU P624AU P5E24AU	48 Port HP6A48AU PSJ48AU P648AU P5E48AU
0-000		Grounding	<b>.</b>	5 68
Bonding           Telecom Bonding Conductor         MCCGBAR           Bonding Connector         BC285SB100		Telecom Grou 19" Rack Mou	ant Ground Bar Abinet Ground K	RKTGB MCCGBAR (it REKGB REKEGS

OptiChannel is a comprehensive system of end-to-end fiber products supporting high bandwidth datacenter applications including 10/40/100 Gigabit Ethernet. OptiChannel's pre-terminated, high density, modular design

Standard LC-MPO Cassettes

SC Duplex, 12-Port, 10G-OM3

LC Duplex, 12-Port, 10G-OM3

LC Duplex, 24-Port, 10G-OM3

LC Quad, 24-Port, 10G-OM3

**OptiChannel High Density** 

Uni-Boot LC Patch Cords

xx = Length: 1, 2, 3, 4, 5, 6, 8, 10 meters.

OCSC50G

OCLC50G

OCLC24P50G

OCLCQ50G

HDPCLC50G3Mxx

HDPCLCSC50G3Mxx

Plug, Connector,

Receptacle

HBL460xx12W

HBL460xx7W

HBL460xx5W

HBL4100xx12W

HBL4100xx7W

HBL4100xx5W

10G-OM3

**OFNR Riser** 

LC to LC, OM3, Aqua

LC to SC, OM3, Aqua

60A and 100A Plug,

Rating Color Coded

by Voltage

60A

120/240V

60A

30 480

60A

3Ø 600V

100A

120/240V

100A

3Ø 480

100A

3Ø 600V

Connector, Receptacle

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promotes efficiency, flexibility and maximum space utilization without compromising accessibility.

IEC Watertight Pin & Sleeve Devices provide safe and dependable performance in the most demanding environments. Heavy duty non-conductive nylon construction provides impact and corrosion protection. Thermoset polyester contact carriers withstand extreme temperatures and provide resistance to

FCLC900K50GM12

FCSC900K50GM12

FCRHD1UBK

FCRHD1UGY

OCLCHD50G3

Plug, Connector,

Receptacle

HBL420xx12W

HBL420xx7W

HBL430xx12W

HBL430xx7W

HBL430xx5W

## **Additional Products** of Interest



50 Amp Locking

An exclusive Hubbell design delivering Insulgrip® features, including insulated housing and superior strain relief. They are ideal for the most demanding high amperage applications.



#### **BIDnet**

All BIDnet pre-terminated cable assemblies are made-to-order items. BIDnet is available in Category 5e, 6 and 6A plenum and riser versions. To help reduce on-site labor and eliminate waste, BIDnet is available in 10 foot through 295 foot lengths. Please call our Inside Sales team at (800) 626-0005 for lead-time and availability.



### **Branch Panel Surge** Protection

Hubbell SpikeShield® service entrance and branch panel surge protection devices reliably handle peak amperage capacity of 40kA to 320kA. They can be easily installed next to the panel to prevent over voltage that can impact sensitive data center equipment and mechanical systems.

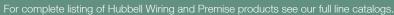
> HUBBELL 11

Wiring Systems





## www.hubbell-premise.com



Poles/Wires

3P/4W

3P/4W

3P/4W

3P/4W

3P/4W

🗊 3P/4W

## **Athletic Facilities and Outdoor Recreation**



Indoor Gymnasium • Outdoor Field • Playgounds • Concessions



## SPIDER<sup>®</sup> Temporary Power Distribution

 when providing temporary electrical power for equipment and lighting, especially since these applications involve frequent plug-ins and disconnects.

 Temporary Power Boxes



			Protection	Recepta	cle Type
Max Rating	Туре	Receptacle Rating	Overload/GFI	Straight Blade	Twist-Lock®
Spider <sup>®</sup> II	(7) Receptacles	20A, 125V	Yes/Yes	SDSB1A	SDTL1A
30A, 120/240V AC	(1) Twist-Lock®*	30A, 120/240V	No/No		
Spider <sup>®</sup> II	(7) Receptacles	20A, 125V	Yes/Yes	SBSB1A	SBTL1A
50A, 120/240V AC	(1) Twist-Lock®*	50A, 125/250V	No/No		
Spider <sup>®</sup> II	(6) Receptacles	20A, 125V	Yes/Yes	SCSB0	SCTL0
60A, 3Ø 120/208V	(1) Pin & Sleeve*	60A, 3ØY, 120/208V	No/No		
50A 120/240V AC	(6) Receptacles	20A, 125V	Yes/Yes	TPDS	TPDL
	(1) Twist-Lock®	30A, 250V	Yes/No		
	(1) Twist-Lock®*	50A 125/250V	No/No		

\* Inlet and outlet.



For complete listing of Hubbell Wiring and Premise products see our full line catalogs

Outdoor events need to ensure maximum safety

Delivering safe, convenient power and multimedia to rugged indoor athletic arenas or harsh outdoor stadium environments poses a challenge for both primary and continuing education facilities. From maintaining spectator safety to providing power and voice, data, and video connections, Hubbell's winning combination is essential to maintaining state-of-the-art athletic facilities with real-time transmission of sporting events.

## Power, Data and Audio/Video Delivery

Hubbell's SPIDER® Temporary Power Distribution system incorporates the latest devices for reliably delivering safe, temporary power to a variety of equipment and lighting systems needed for outdoor events.

## Safety and Durability

Hubbell's watertight devices maintain safe, reliable power at outdoor events, even when it's raining. In the event of pedestrian and vehicular traffic, Hubbell cable and hose protection systems prevent trip or shock hazards.

## **Athletic Facilities and Outdoor Recreation**

## **Safety and Security**

TrukTrak<sup>®</sup> and TredTrak<sup>®</sup> Systems

5 Channel 45° right turn

5 Channel 45° left turn

5 Channel "X" fitting

5 Channel "Y" fitting

Description

5 Channel

3 Channel

2 Channel

Exposed cables, cords and hoses can be a trip hazard for pedestrians, as well as a potential shock hazard. Hubbell offers a variety of hose and cable protection systems that provide a safe ramping system for both pedestrian and vehicle traffic. Heavy-duty, medium-duty and ADAAG compliant systems are available.

TredTrak<sup>®</sup>

HBLTRED5B

HBLTRED5XB

HBLTRED5YB

## Additional Products of Interest



Hubbell Copper Solutions Designed to exceed all applicable standards for performance and reliability, Hubbell copper solutions offer a fully integrated system of copper cabling and components.

## **Audio/Video Enclosures**

Optimizing Cabling in hospitality, entertainment venues and remote environments, the RE-BOX<sup>®</sup> Zone Cabling Infrastructure System offers comprehensive zone cabling solutions to meet the needs of any topology.

#### RE-BOX<sup>®</sup> – Commercial Equipment Cabinet Pre-Configured Version

Max. Switch Switch Cap. Depth Height

Cap.	Depth	Height x Width x Depth	Catalog #		
2U	14" (356)	32"(813) x 24.2"(615) 7"(178)	RE2xx		
5U	14" (356)	32" (813) x 24.2"(615) x 10"(254)	RE4xx		
5U	22" (559)	42"(1067) x 24.2"(615) x 10"(254)	RE4Xxx		
xx = Color: B (Black) and no suffix (Light Gray).					

TrukTrak<sup>®</sup>

HBLTT5B

HBLTT3B

HBLTT2B

HBLTT545RB

HBLTT545LB

Contents: base/rear section with welded 19" brackets for 2 hubs, front door with 2 locks (NSQ tool), a set of 19" extension brackets for 3 additional hubs (RE4xx only) and a set 19" bottom hinge brackets for patch panels

## User-Configurable Version Light Gray Color

Units	Height x Width x Depth	Catalog No.
2U	24"(600) x 24.2"(615) x 10"(254)	IDF24
4U	32"(813) x 24.2"(615) x 10"(254)	IDF32
6U	42"(1067) x 24.2"(615) x 10"(254)	IDF42
		1 0100 0

Contents: 1 base/rear section and 1 front door with 2 locks (NSQ tool) (IDF24 has only 1 lock).

### **Power Connections**

When it comes to safety, most everyone knows that water and electricity can create a dangerous environment. From outdoor applications to indoor wash downs, ensuring a watertight seal for electrical devices is critical to ensuring maximum safety of personnel in any wet environment.

			9	São	*		Sis .
Locking Device	S		Locking Devic	es	St	raight Blade De	evices
NEMA Rating	Poles/Wires	Plug	Connector	Receptacle	Plug	Connector	Receptacle
15A 125V	2P/3W	24W47H	25W47H	65W47H	14W47H	15W47H	60W47H
15A 277V AC	2P/3W	24W34H	25W34H	65W34H	-	_	_
20A 125V	2P/3W	26W47H	27W47H	67W47H	14W33H	15W33H	60W33H
20A 250V	2P/3W	26W48H	27W48H	67W48H	14W48H	15W48H	60W48H
20A 277V AC	2P/3W	26W49H	27W49H	67W49H	-	_	_
20A 125/250V AC	3P/4W	26W74H	27W74H	67W74H	-	_	_
20A 3Ø 250V	3P/4W	26W75H	27W75H	67W75H	-	_	_
30A 3Ø 250V AC	3P/4W	28W75H	29W75H	69W75H	-	_	_
30A 3Ø 480V AC	3P/4W	28W76H	29W76H	69W76H	-	_	_



Catalog Number HBLAT5KITA

### RE-BOX<sup>®</sup> 10GbE Cable Entry Pre-Configured Version

AccessTrak<sup>®</sup> System

5 Channel AccessTrak kit\*

5 Channel AccessTrak trough HBLAT5A

\*Contents: (1) trough; (1 set) end rails; (1 set) ramps;

Description

(2 sets) end rails.

Switcl	1	
Cap.	Height x Width x Depth	Catalog No.
2U	32"(813) x 24.2"(615) x 7"(178)	RE210G
5U	32"(813) x 24.2"(615) x 10"(254)	RE410G
Same	as standard pre-configured RE-BOX® e	xcept top

conduit knockouts replaced with adjustable, high cable capacity grommet plate.

Contents: base/rear section with welded 19" brackets for 2 hubs, front door with 2 locks (NSQ tool), a set of 19" extension brackets for 3 additional hubs (RE4xx only) and a set 19" bottom hinge brackets for patch panels.



## Single Pole

Hubbell's Single Pole connectors are made from a specially formulated thermoplastic elastomer that resists cracking in cold, hot or oily conditions as well as any other harmful environments. The connectors have been designed so they are easy to assemble, requiring no special tools.



Hubbell's full line of indoor and outdoor fiber cables supports a variety of rugged deployment applications, delivering high speed fiber optic service to remote locations. Interlock armored indoor cable is available for direct building deployment without the need for inner duct tubing. Loose tube outdoor fiber cable, available in armored or non armored, is a rugged gel-free construction suitable for direct burial between facilities.



## **Medical Centers and Health Services**



Nurse's Office • Medical Centers • Imaging • Wa

ng • Walk-In Clinics



## **Hospital Grade Receptacles**

Secondary education facilities often have their own medical centers and health services for students, including on-site clinics and sports rehabilitation/physical therapy centers. Medical centers also require data connections to manage student medical records. In addition, many sports rehab/ physical therapy centers use hydrotherapy, requiring nearby connections to have ingress protection against water.

### Installation Efficiency

While Hubbell Hospital Grade and Tamper-Resistant Receptacles are put through comprehensive rigorous testing to accommodate abrupt plug removal and impact, they are also quick and easy to install.

## Power, Data and Audio/Video Delivery

Hubbell's data, audio and video connectivity support digital imaging and electronic medical records while higher capacity 50 and 60 Amp power devices deliver power for diagnostic equipment.



Hubbell understands that healthcare is where safety, reliability and performance matters the most. These devices feature exclusive nickel-plated bypass power contact design to ensure uninterrupted power and a four-point grounding system for low resistance to fault currents.

UG

Hospital Grade • I	Receptacles			0-0
Туре	Color	15A 125V	20A 125V	-(PA)
Duplex	lvory Red White Blue Brown Gray Light Almond	HBL8200I HBL8200RED HBL8200W – HBL8200 HBL8200GY HBL8200LA	HBL8300I HBL8300RED HBL8300W HBL8300BL HBL8300 HBL8300GY HBL8300LA	
Tamper-Resistant	lvory Red White Brown Gray Light Almond	HBL8200SGIA HBL8200SGRA HBL8200SGWA HBL8200SGA HBL8200SGGYA HBL8200SGLA	HBL8300SGIA HBL8300SGRA HBL8300SGWA HBL8300SGA HBL8300SGGYA HBL8300SGLA	



## **Medical Centers and Health Services**

## **Personnel Protection**

Outpatient healthcare facilities within an institution require the same level of performance as hospitals. Medical care centers and walk-in clinics require the safety and convenience of tamper-resistant receptacles. Hubbell tamper-resistant receptacles restrict improper access to energized contacts.

AUTOGUARD <sup>®</sup> Self Tes Hospital Grade • GFCI				D.G.C
Description	Color	15A 125V	20A 125V	
Flush, polyester face, back and side wired, multiple drive screws	Black Brown Gray Ivory Red White	GFR8200SGBK GFR8200SG GFR8200SGGY GFR8200SGI GFR8200SGR GFR8200SGW	GFR8300SGBK GFR8300SG GFR8300SGGY GFR8300SGI GFR8300SGR GFR8300SGW	
Hospital Grade <ul> <li>Tamper-Resistant GFC</li> </ul>	I Receptacles		HR.	- D000
Description	Calar	154 1051	004 1051/	and the second second

Tamper Heeletant al en	leeeptaelee		<b>200</b>	Dena
Description	Color	15A 125V	20A 125V	0
Hospital Grade	Brown	GFR8200HTR	GFR8300HTR	
Flush, nylon face,	Gray	GFR8200HGYTR	GFR8300HGYTR	
back and side wired,	lvory	GFR8200HITR	GFR8300HITR	3. 10
multiple drive screws,	Light Almond	GFR8200HLATR	GFR8300HLATR	· 1
automatic grounding clip	Red	GFR8200HRTR	GFR8300HRTR	1 - 6
	White	GFR8200HWTR	GFR8300HWTR	030

## **Data and Audio/Video Connectivity**

Healthcare facilities contain a variety of high-tech imaging and diagnostic equipment to determine a patient's condition. Many of these require higher capacity power and data connections than traditional conventional outlets and connectors can provide.

	PEED® S ry 6/10G	hielded Jacks bE	s, 🌆
	Pkg.	B-Wired	A-Wired
Category	Quantity	Catalog No.	Catalog No.
6	2	SJ62B	SJ62Å
6	24	SJ624B	SJ624A
5e	2	SJ5E2B	SJ5E2A

#### NEXTSPEED® Ascent Shielded Category 6A, Trunk Cable Assemblies BIDnet Pre-Terminated Copper Trunk Assemblies

SJ5E24B

SJ5E24A

BIDnet Pre-Terminated Copper Trunk Assemblies improve air flow in the data center, decrease installation time and supply superior performance. All BIDnet pre-terminated cable assemblies are made-to-order items. Please call our Inside Sales team at (800) 626-0005 for lead-time and availability.

#### NEXTSPEED® Shielded Category 6A, Patch Cords 1 patch cord PC6AxxYY

xx = Color: B (Blue), BK (Black), GY (Gray), Y (Yellow), OR (Orange),
 R (Red), GN (Green), P (Purple) or W (White)
 YY (Standard Length: 01 (1ft), 03 (3ft), 05 (5ft), 07 (7ft), 10 (10ft), 15 (15ft)

YY (Standard Length: 01 (1π), 03 (3π), 05 (5π), 07 (7π), 10 (10π), 15 (15π) or 20 (20ft)



### **Shield Colored Dust Covers**

00 per	package
olor	Catalog Number
lue	IDCSB
lack	IDCSBK
reen	IDCSGN
range	IDCSOR
ellow	IDCSY

## **Power Connections**

5e

24

Insulgrip<sup>®</sup> Hospital Grade Plugs and Connectors are engineered to provide a high degree of durability and feature ribbed nylon housing for impact and chemical resistance. The powerful cord grip prevents conductor slippage and strain on terminals and adjusts to a wide range of cord sizes.



Amps	NEMA Rating	Poles/ Wires	Description	Plug	Angled Plug	Connector
15A 125V (	• • • • • • • • •	2-Pole 3-Wire	Black/White Transparent Valise; white	HBL8215C HBL8215CT HBL8115V	_ HBL8215CAT _	HBL8219C HBL8219CT HBL8119V
20A 125V (	• • • •	2-Pole 3-Wire	Black/White Transparent Valise®; white	HBL8315C HBL8315CT HBL8364V	_ HBL8315CAT _	HBL8319C HBL8319CT —

## Additional Products of Interest



## Wall/Ceiling Duct System

The Hubbell Wall/Ceiling Duct System is utilized in combination with Hubbell's Trench Duct product offering for the enclosure of wiring to X-Ray machines or MRI equipment. Hubbell's aluminum wall duct is used for applications that require non ferrous metal raceways. Wall Duct is available in flush mount and surface mount versions.



### **Trench Duct System**

The Hubbell Trench Duct System is utilized as an in-floor feeder for the Hubbell Wall Duct product line in hospital and other radiology facilities. Trench Duct can also be utilized as a stand-alone wire management system in retail store and general commercial applications.



### Hubbell Switches and Illuminated Switches

Hubbell Toggle Switch's heavy duty nylon toggle resists abuse while the Hubbell Decorator Switch's thermoplastic rocker assures quiet operation and precise timing. One piece rivetless copper alloy spring contact arm and terminal plate provides long life.



## **Mechanical and Maintenance Facilities**





## **IEC Mechanical Interlock Enclosures**

Every education facility includes mechanical and maintenance areas that typically encompass a wide range of equipment like backup generators, HVAC units and air handlers that need high-capacity, safe, and reliable power. Without it, an entire school or university can shut down. Mechanical and maintenance personnel also strive to keep energy costs down throughout education facilities.

## Safety and Durability

From CIRCUIT-LOCK<sup>®</sup> disconnect switches and interlock enclosures, to portable cords and cable management, Hubbell offers a variety of devices to provide safe, reliable power and control for mechanical equipment.

## Power, Data and Audio/Video Delivery

With wireless and network communications now the norm, all personnel within an education facility require access to these services. Hubbell's Wireless Access Point Ceiling Boxes are ideal for delivering wireless service in remote mechanical and maintenance areas.



Hubbell's revolutionary CIRCUIT-LOCK<sup>®</sup> interlock enclosure incorporates the disconnect switch and IEC receptacle in one compact unit. At the same time, it eliminates the possibility of making or breaking the circuit under load or making a casual or lazy connection.

20 and 30 Amp			
Rating Color Code	d	Poles/	Mechanical
by Voltage	~	Wires	Interlock
20A 3Ø 480V	۲	3P 4W	HBL420MI7W
30A 3Ø 250V	۲	3P 4W	HBL430MI9W
30A 3Ø 480V		3P 4W	HBL430MI7W
30A 3Ø 600V		3P 4W	HBL430MI5W
30A 3ØY 277/480V		4P 5W	HBL530MI7W
For mating plug, re	eplace	MI with F	. Ex. HBL420MI7W

For mating plug, replace **MI** with **P**. Ex. HBL420MI7W (mechanical interlock) to HBL420P7W (mating plug).

60 and 100 Amp					
Rating Color Code by Voltage	d Poles/ Wires	Mechanical Interlock			
60A 3Ø 250V	💽 3P 4W	HBL460MI9W			
60A 3Ø 480V	🗊 3P 4W	HBL460MI7W			
60A 3Ø 600V	💽 3P 4W	HBL460MI5W			
60A 3ØY 120/208V	🛞 4P 5W	HBL560MI9W			
100A 250V	💽 3P 4W	HBL4100MI9W			
100A 3Ø 480V	💮 3P 4W	HBL4100MI7W			
100A 3Ø 600V	💮 3P 4W	HBL4100MI5W			
100A 3ØY 120/208V	🛞 4P 5W	HBL5100MI9W			



## **Mechanical and Maintenance Facilities**

## **Cable Management**

Cable reels can help eliminate unmanaged cords and cables that would otherwise cause trip hazards or an increased potential of electric shock. Hubbell offers a wide range of cord reels that provide cable protection, including watertight, industrial, commercial and static discharge reels.

#### **Industrial Power Cord Reels**

125V AC, 45 Ft (13.7m) Cable, Cable Type 12/3 SJEO

	NEMA	
Cord End	Style	Catalog Number
HBL5269C 15A connector	5-15R	HBL45123C
HBL5369C 20A connector	5-20R	HBL45123C20
Portable outlet box; 15A gray duplex w/GFCI protection	5-15R	HBL45123GF15
Portable outlet box; 20A gray duplex w/GFCI protection	5-20R	HBL45123GF20

#### **Commercial Cord Reels**

Commercial Coru Reels						0
	Watts	Cable	Volts			- al
Cord End	(Max)	Feet (m)	AC	Cable Type	Catalog Number	
Triple tap outlet; 15A	1200	40 (12.2)	125	12/3 SJTW	HBLC40123TT	
Metallic incandescent hand lamp with	1625	25 (7.6)	125	14/3 SJT	HBLC25143IN	
receptacle; 13A						Cal
Fluorescent hand lamp and inline	1200	40 (12.2)	120	16/3 SJT	HBLC40163FL	Sec. Con
receptacle; 10A						1

## **Data, Audio and Video Connectivity**

Hubbell's innovative ceiling and wireless access enclosures support multiple Wireless Access Points (WAP) and IP devices in remote and high traffic areas. These rugged all metal lockable enclosures can be mounted on the wall or in the ceiling grid allowing for convenient location installation.



### Wireless Access Point Ceiling Box

#### **Ceiling Box**

Delivery: Aluminum enclosure, (1) fire-rated foam kit for cable entries and exits, hinged door equipment mounting plate (factory installed), lockable knob assembly and cable entry port and cover (factory installed)

	Mounting Plate	External Dimensions	Weight Capacity Lb.	Cable Entry		
Description	Dims. H x W	HxWxD	Door (Total)	Dimensions	Catalog No.	
Universal WAP Enclosure	9.7" x 5.25"	4"x10"x12.7"	15 (20)	6.5"x1.2"	WBC1	
CISCO® Aironet 1200 Serie	es N/A	10"x10.5"x13.2"	15 (20)	6.5"x1.2"	WBC12	
						_

WBC1 uses key no. 2233. WBC12 uses key no. C346A.

#### Wall Box

Delivery: (1) aluminum enclosure, (4) plastic conical screw anchors for #10 screw, (1) drill template, (4) #10 x 1 pan head screws and (4) flat steel washers, size #10

	External Dimensions	Weight		
Description	HxWxD	Lbs	Office White	Black
Wall Box	8"x11"x3"	1.5	WBW10W	WBW1BK
Uses key no. 33	3. Spare Lock Key availal	ble, Catalo	og number KEY3	33.

## **Safety and Security**

GFCIs are critical for protecting people when using portable line cords and outlets in a variety of indoor and outdoor applications. Portable GFCIs provide open-neutral protection for temporary power applications, this is required to meet OSHA requirements.

Circuit G Portable Line Cor	GFCI	6	6
Rating	Length	Single	Triple Tap
15A	2 ft.	GFP2Cxx	GFP2TTxx
120V AC	25 ft.	GFP25Cxx	GFP25TTxx
xx= A (Auto	omatic) o	r <b>M</b> (Manual) Sei	t.
Multiple Portable			

Portable GFCI		-
Description	Rating	Cat. No.
4-Outlet;	15A 120V AC	GFP15M
2-Duplex;	20A 120V AC	GFP20M
Manual Set		

Circuit C In-Line C 2 ft. cord	GFCI	99	
Rating	Туре	Automatic Set	Manual Set
15A	Single	GFPIL15125A	GFPIL15125M
120V AC	Triple Tap	GFPIL15125TRIA	GFPIL15125TRIM
20A 120V AC	Locking	GFPIL20125LKA	GFPIL20125LKM
20A 250V AC	Locking	GFPIL20250LKA	GFPIL20250LKM
		-	

## Additional Products of Interest



#### **Portable Outlet Boxes**

Portable non-metallic outlet boxes provide a safe, rugged, portable enclosure with an integral sealed cord connector fitting that also work well for pendant applications.



**Barrel Key Switch** An ideal solution for applications that require authorized access only for a secure level of control.



Disconnect Switches for Use with Variable Frequency Drives Hubbell's Disconnect Switch for Variable Frequency Drives (VFDs) prevents downtime from out of sequence equipment shutdowns. The HBLDS3VFD integrates a verified break before break auxiliary contact factory installed in the HBLDS3 30 Amp disconnect switch enclosure that interfaces directly with VFDs.



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# HUBBELL® EDUCATION Application Guide



Scan to watch the Hubbell Education video. Visit www.hubbell-wiring.comto access Hubbell's Education Solutions website.

## Hubbell Installation Efficiency Product Solutions



## **Pre-Wired Raceway**

Available in aluminum, steel and non-metallic versions, Hubbell's pre-wired raceway systems will keep your projects on schedule, reduce on-site labor and waste. Our local sales team is available to support your efforts.



## Pre-Fab Solutions

Pre-fab solutions can reduce projects by as much as 30% while reducing on-site waste. The Rough in Ready Pre-Fab solution offered by Hubbell provides a variety of options from innovative bracket to cableready assemblies.



## CONNEXION

Hubbell CONNEXION Zone Distribution System is a factory assembled modular plug-n-play system that delivers power and data to the workstation in raised floor installations.

## SNAPConnect® Modular Devices

Hubbell's SNAPConnect® offers the latest in innovative design, to save time and money, while delivering a safe, reliable and durable connection. SNAPConnect® reduces labor costs during the initial installation and also provides future labor savings if device replacement or upgrade is ever required.

## **Hubbell Energy Efficiency Solutions**



## Sensors

Reduce energy consumption in a wide variety of commercial, residential and industrial applications with Hubbell lighting controls and sensors.

Hubbell's sensors facilitate compliance with the latest building codes and standards, including ASHRAE/IESNA 90.1, CEC's Title 24, and help obtain LEED<sup>®</sup> points.



## Commercial Electric Vehicle Charging Stations

PEP Stations (EVSEs) are exclusively represented by Hubbell. EVSEs are an ideal fit for commercial property electric vehicle charging requirements. Their distinctive styling provides property owners with a design that is complimentary to building architecture and supports a commitment to reducing emissions.



## **Power Strips**

Hubbell's SpikeShield<sup>®</sup> Energy Saving Surge Protective Devices (ESPS Series) reduce power consumption by eliminating phantom power draw of unused electronics and appliances.

Hubbell offers a complete offering of power strips in various levels of outlet configurations and surge protection.

## Literature Support

Hubbell offers an extensive literature library for product support. Downloadable PDFs are available online at www.hubbell-wiring.com under the media tab.



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Hubbell Premise Wiring Hubbell Incorporated (Delaware) 23 Clara Drive, Suite 103, Mystic, CT 06355 Phone (800) 626-0005 • FAX (860) 535-8328



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