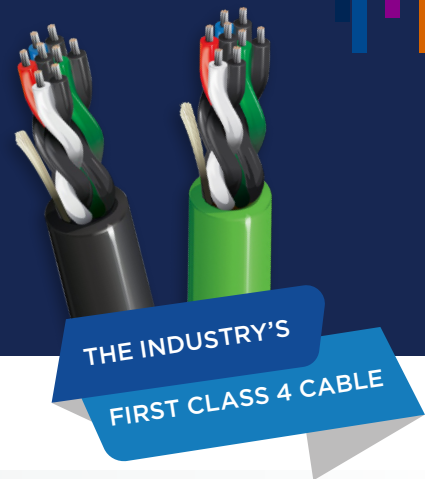


Digital Electricity™ Cables

PRODUCT BULLETIN 

Safe, intelligent electricity reliably delivered across thousands of feet

Designed in conjunction with VoltServer, the creator of Digital Electricity™*, Belden Digital Electricity (DE) Cables transmit “pulses” of DC power across long distances in a safe, efficient manner. Transmitters and receivers constantly monitor line conditions to make sure power pulses are properly received. If a problem is detected, power distribution stops immediately to protect people and equipment.

Hybrid DE Cables allow for the simultaneous transmission of DE power and data in the same cable. Hybrid cables can be coupled with our broad portfolio of fiber connectivity products for an end-to-end infrastructure to support distributed antenna systems (DAS).

Key Applications

- Distributed Antenna Systems (DAS)
- Passive Optical Networks (PON)
- Power over long distances
- Security (Cameras)
- Wireless Access Points (WAP)

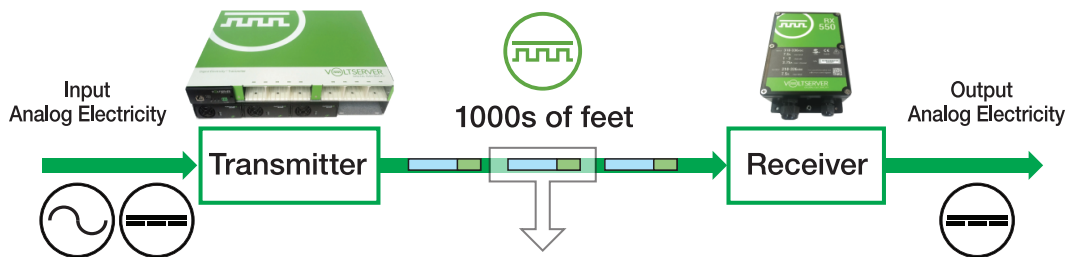
Benefits at a Glance

- Supports sensing to detect cable problems
- Safe to touch without dangerous electrical shock
- Extended reach (thousands of feet) with mutual capacitance of <math><35\text{ pF/ft}</math> to maintain power-transfer quality
- Ideal for indoor and indoor/outdoor applications
- Hybrid construction means fewer cables to stock and fewer cables to pull

Key Features

- Stranded design maintains cable flexibility
- 300V rating
- Unshielded or shielded options
- Tinned copper conductors improve cable longevity
- Breakout and distribution fiber constructions
- OM3, OM4 and OS2 type fiber

How does Digital Electricity work?



Digital Electricity Power Transmission

1. Long-distance/high-power transmission
2. Safe to touch with active line monitoring
3. Cost effective - smaller conductors running in telecommunications trays

* Digital Electricity is a trademark of VoltServer. For more information about Digital Electricity, visit voltserver.com

Ordering Information

Digital Electricity™ Copper Cables (Power Transmission)

Building a SmartPart Number

Please select from options below to build your SmartPart number.

DE	I	P	16	8	U
Fixed Letter Series	Application	Rating/Type	AWG	Pair Count ¹	Shielding
DE	Indoor	I Indoor	12 12	2 Pairs 2	Unshielded U
	Indoor/Outdoor	D Plenum P	14 14	4 Pairs 4	Foil Shield F
	Waterblocked-Indoor/Outdoor	W Indoor/Outdoor or Waterblocked	16 16	8 Pairs 8	
		N General Purpose/Wet Locations	18 18		

¹CL4 rated cable only applicable to DEDN and DEWN product family

Example:


DEIP168U - Digital Electricity optimized copper cable, Indoor, Plenum-rated, 16 AWG, 8 Stranded Tinned-Copper Pairs, Unshielded, 2000 Ft Reel, Apple Green Jacket

DEDN148U - Digital Electricity optimized copper cable, Indoor/Outdoor, CL4-rated, Sun Res, Wet Locations, 14 AWG, 8 Stranded Tinned-Copper Pairs, Unshielded, 2000 Ft Reel, Black Jacket

DEWN164U - Digital Electricity optimized copper cable, Indoor/Outdoor with waterblocking tape, CM, CL4-rated, Sun Res, Wet Locations, 16AWG, 4 Stranded Tinned-Copper Pairs, Unshielded, 2000 FT Reel, Black Jacket

Accompany power delivery with data delivery over Belden fiber cables in the same installation.

FiberExpress Distribution Cables (Data Transmission)

Belden Part Number	Fiber Count	Construction
OS2 Yellow	Non-Unitized - Plenum	
FISD002P9	2	
FISD006P9	6	
FISD012P9	12	

Riser versions and other fiber configurations and constructions available.

Belden partners with JMA Wireless to deliver a complete DAS solution. By adding Digital Electricity Cables to the DAS portfolio, Belden now offers unparalleled options for delivering power and data to DAS equipment, wherever that equipment needs to be.



Contact your local sales rep for more information.

Combine power and data under the same cable jacket with Belden Hybrid Digital Electricity cables.

Hybrid Digital Electricity™ Cables (Power and Data Transmission)

Building a SmartPart Number

DH	I	P	16	2	U	4	B	02	C
FX Fiber Cable	Location	Rating/Type	Copper Type	Pair Count	Shielding	Fiber Type	Family	Fiber Count	Sub-Unit Type/Configuration
Hybrid DE DH	Indoor	I Plenum P	16 AWG 16	2 Pairs 2	Unshielded U	OM3 3	Breakout B	2 Fibers 02	Breakout
	Waterblocked-Indoor/Outdoor	W LSZH CMR-OF/FT4-ST1 L	18 AWG 18	4 Pairs 4		OM4 4	Distribution D	4 Fibers 04	2.0 mm Sub (1F x 900 μm) B
			20 AWG 20	8 Pairs 8		OS2 (G.657.A1) S		6 Fibers 06	3.0 mm Sub (1F x 900 μm) C
								12 Fibers 12	Distribution: Unitized
									1 Fiber Distribution Tube (900 μm) J

Example:

DHIP162U4B02C - Digital Electricity optimized hybrid, Indoor, 16 AWG, 2 Stranded Tinned-Copper Pairs, OM4, Breakout, 2 Fiber Strands, 3.0 mm Subunit, Unshielded, Plenum Rated, Apple Green Jacket

DHIP182USD06J - Digital Electricity optimized hybrid, Indoor, 18 AWG, 2 Stranded Tinned-Copper Pairs, OS2, Distribution, 6 Fiber Strands, 1 fiber distribution tube, Unshielded, Plenum Rated, Apple Green Jacket

* Plenum default jacket color is Apple Green. Waterblocked-Indoor/Outdoor default jacket color is black. Length specified at the time of order.

* LSZH cable is compliant to NFPA130 rating



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