



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).



BENEFITS

- 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



FEATURES

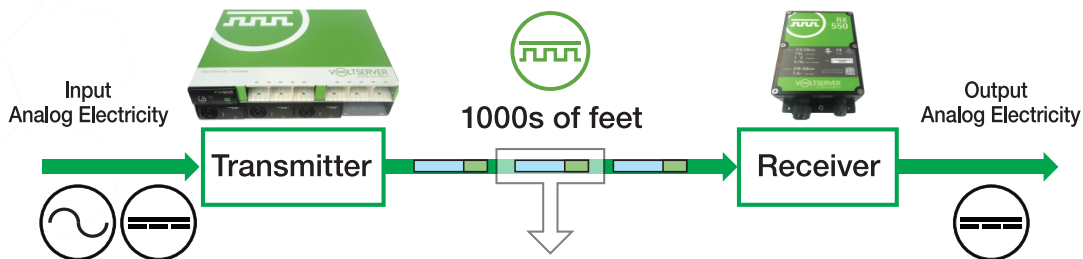
- Stranded design maintains cable flexibility
- 300V rating
- Unshielded or shielded options
- Tinned copper conductors improve cable longevity
- Breakout and distribution fiber constructions
- OM3, OM4 and OS2 type fiber



KEY APPLICATIONS

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

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

Fixed Letter Series

DE

1. Choose Application

I

2. Choose Rating/Type

P

3. Choose Gauge Size

18

4. Choose Pair Count

4

5. Choose Shielding

U

Application	
I	Indoor
D	Indoor/Outdoor
W	Waterblocked-Indoor/Outdoor

Rating/Type	
	Indoor
P	Plenum
	Indoor/Outdoor or Waterblocked
N	General Purpose/Wet Locations
	Indoor/Outdoor
L	LSZH

AWG	
12	12
14	14
16	16
18	18
20	20
22	22
24	24

Pair Count ¹	
2	2 Pairs
4	4 Pairs
8	8 Pairs
10	10 Pairs

Shielding	
U	Unshielded
F	Foil Shield
D	Dual Shield (Foil+90% TC Braid)

1. Up to 10-pair for Indoor Plenum and 24-pair for Indoor/Outdoor and Waterblocked

* Plenum default jacket color is Apple Green. Indoor/Outdoor and Waterblocked default jacket color is black. Default reel size is 2000 ft. Other colors and lengths available upon request.

Examples:

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, CL3-rated, Sun Res, Wet Locations, 14 AWG, 8 Stranded Tinned-Copper Pairs, Unshielded, 2000 Ft Reel, Black Jacket

DEWN164U - Digital Electricity optimized copper cable, Waterblocking tape for best protection below-grade, in-conduit, CM-rated, 16 AWG, 4 Stranded Tinned-Copper Pairs, Unshielded, 2000 Ft Reel, Black Jacket



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.

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

FiberExpress Distribution Cables (Data Transmission)

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

Riser versions and other fiber configurations and constructions available.

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

Fixed Letter Series

DH

1. Choose Cable Location

I

2. Choose Rating/Type

P

3. Choose Copper Type

16

4. Choose Pair Count

2

5. Choose Cable Shielding

U

6. Choose Fiber Type

3

7. Choose Family

B

8. Choose Fiber Count

02

9. Choose Fiber Sub-Unit Configuration

C

FX Fiber Cable	
DH	Hybrid DE

Location	
I	Indoor
W	Waterblocked-Indoor/Outdoor

Rating/Type	
P	Plenum CMP-OF

Copper Type	
16	16 AWG
18	18 AWG
20	20 AWG

Pair Count	
2	2 Pairs
4	4 Pairs
8	8 Pairs

Shielding	
U	Unshielded

Fiber Type	
3	OM3
4	OM4
S	OS2 (G.657.A1)

Family	
B	Breakout
D	Distribution

Fiber Count	
02	2 Fibers
04	4 Fibers
06	6 Fibers
12	12 Fibers

Sub-Unit Type/Configuration	
Breakout	
C	3.0 mm Sub (1F x 900 μm)
B	2.0mm Sub (1F x 900 μm)
Distribution: Unitized	
J	1 Fiber Distribution Tube (900 μm)

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

Examples:

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

For more information, call **1.800.BELDEN.1** (1.800.235.3361) or visit www.belden.com/de

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