



APPLICATION GUIDE



Beneath every wireless system is a high-performance wired infrastructure that must be able to support everything enabling Wi-Fi: wireless access points, cellular network nodes, etc.

In areas with high levels of densification (such as urban areas), or where cellular coverage is impeded by buildings, landscaping, etc., lower-power cellular network nodes can be added to improve coverage and capacity across a specific distance. Instead of being installed miles apart, they're installed every few blocks for targeted, localized coverage.

Small cells are nodes that transmit data to and from wireless devices, providing network coverage and adding targeted capacity indoors or outdoors. By redistributing signals from cellular carriers and bringing them inside or dispersing them across a vast area, they improve wireless coverage.

Small cells are used for:

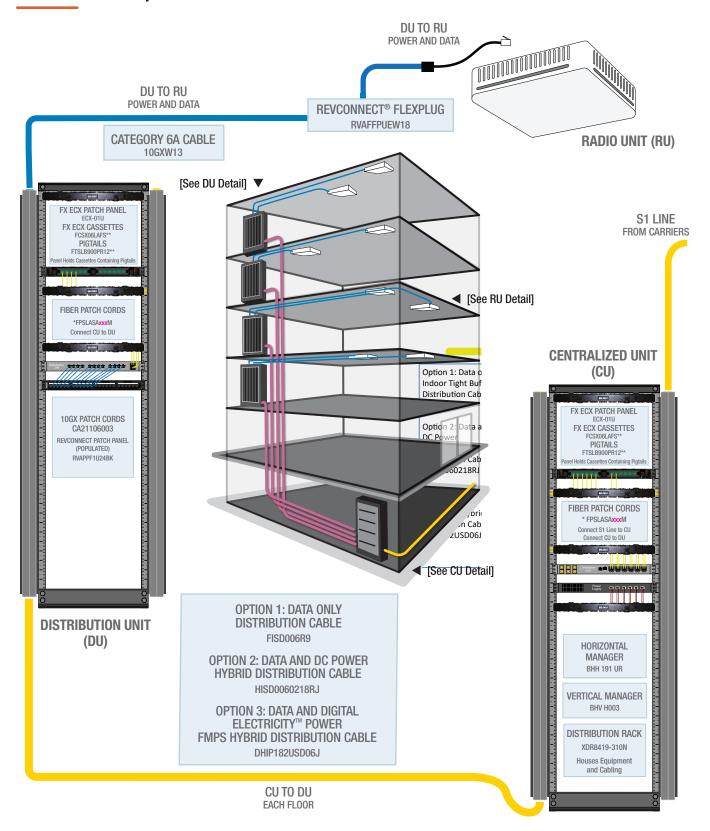
- Offload
- HetNet (heterogeneous networks that seamlessly transition between layers and radio interfaces of the cellular network to create a consistent user experience)
- Coverage of 5G and 6G technologies

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Small Cells Example



The system configurations shown are illustrative. We offer a variety of options to meet your specific use case and project constraints. Please reach out to Belden, and our solutions consultants will gladly assist you in configuring the systems you need.

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Small Cells Example Checklist

	Belden Part Number	Description
	FISD006P9	FX Indoor OS2 Distribution Tight Buffer, 6f OFNP, Yellow Jacket
	FDSD006P9	FX Indoor/Outdoor OS2 Distribution Tight Buffer, 6f OFNP, Black Jacket
	FISD006A9	FX Indoor OS2 Distribution Tight Buffer, 6f OFCP, AIA, Yellow Jacket
Fiber Cables	FDSD006A9	FX Indoor/Outdoor OS2 Distribution Tight Buffer, 6f OFCP, AIA, Black Jacket
Pigtails	FXFSTOSPL	FX Fusion Splicer Kit
	FTSLB900PR12	FX Field-Term Pigtail, OS2, LC/APC Simplex, Tight Buffer, 900 μm, 12f, 2 m
	FTSSB900PR12	FX Field-Term Pigtail, OS2, SC/APC Simplex, Tight Buffer, 900 μm, 12f, 2 m
	FXFUHS900AB25	Heat Shrink Protector Sleeves, 900 μm to 900 μm, 2.5 mm dia x 60 mm, 25pcs
	FPSLALA002M	FX Patch Cord, OS2, LC/APC Duplex - LC/APC Duplex, 2M, A-TO-B
	FPSSASA002M	FX Patch Cord, OS2, SC/APC Duplex - SC/APC Duplex, 2M, A-TO-B
Patch Cords	FPSLASA002M	FX Patch Cord, OS2, LC/APC Duplex - SC/APC Duplex, 2M, A-TO-B
	ECX-01U	FX ECX 1U Patch Panel Housing
	ECX-02U	FX ECX 2U Patch Panel Housing
	ECX-04U	FX ECX 4U Patch Panel Housing
	ECX-BRKTMNT-0	FX ECX 4U Rack-Mounting Bracket, Flush
Patch Panels	ECX-LOCKKIT	FX ECX Door Lock Kit
and the second	FCSX06LAFS	FX ECX Splice Cassette, OS2, LC/APC Duplex, 6 Port, 12f, Green
	FCSX12LAFS	FX ECX Splice Cassette, OS2, LC/APC Duplex, 12 Port, 24f, Green
	FCSX03SAFS	FX ECX Splice Cassette, OS2, SC/APC Duplex, 3 Port, 6f, Green
Cassettes	FCSX06SAFS	FX ECX Splice Cassette, OS2, SC/APC Duplex, 6 Port, 12f, Green
Wall- Mount Boxes	ECX-01WH	FX ECX Single Cassette Holder
5	DEIP162U	FMPS Copper Only 16 AWG, 2 Cu Pairs, Plenum
	DEIP182U	FMPS Copper Only 18 AWG, 2 Cu Pairs, Plenum
	DHIP162USD06J	FMPS Hybrid, 16 AWG, 2 Cu Pairs, 6f, OS2, Distribution, 4.5 mm Sub, Plenum
FMPS Cables	DHIP182USD06J	FMPS Hybrid, 18 AWG, 2 Cu Pairs, 6f, OS2, Distribution, 4.5 mm Sub, Plenum
	XDR8419-3122836	Four-Post Distribution Rack
	XDR8419-310N	Two-Post Distribution Rack
	BHH 191 UR	Horizontal Manager
Racks and Managers	BHV H003	Vertical Manager

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