

## Small Cells

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:

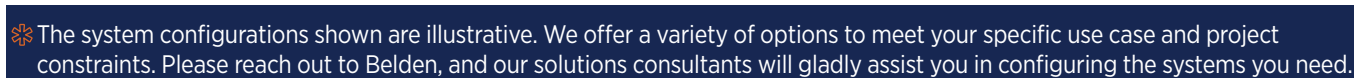
- Offload
- HetNet (heterogeneous networks that seamlessly transition between layers and radio interfaces of the cellular network to create a consistent user experience)
- Coverage of 5G and 6G technologies



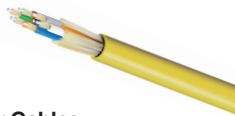
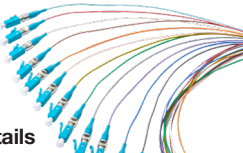






### APPLICATION GUIDE

Belden offers a full suite of copper and fiber cable and connectivity systems that support every type of technology you'll need now and in the future. Learn more about how Belden is uniquely positioned to provide reliable products and services for your jobs. Visit [belden.com/Solutions/Smart-Building-Solutions](https://belden.com/Solutions/Smart-Building-Solutions).

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# Small Cells Example Checklist

	Belden Part Number	Description
 <b>Fiber Cables</b>	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
	FDSD006A9	FX Indoor/Outdoor OS2 Distribution Tight Buffer, 6f OFCP, AIA, Black Jacket
 <b>Pigtails</b>	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
 <b>Patch Cords</b>	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
	FPSLASA002M	FX Patch Cord, OS2, LC/APC Duplex - SC/APC Duplex, 2M, A-TO-B
 <b>Patch Panels</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-BRKTMT-0	FX ECX 4U Rack-Mounting Bracket, Flush
	ECX-LOCKKIT	FX ECX Door Lock Kit
 <b>Cassettes</b>	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
	FCSX06SAFS	FX ECX Splice Cassette, OS2, SC/APC Duplex, 6 Port, 12f, Green
 <b>Wall-Mount Boxes</b>	ECX-01WH	FX ECX Single Cassette Holder
 <b>FMPS Cables</b>	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
	DHIP182USD06J	FMPS Hybrid, 18 AWG, 2 Cu Pairs, 6f, OS2, Distribution, 4.5 mm Sub, Plenum
 <b>Racks and Managers</b>	XDR8419-3122836	Four-Post Distribution Rack
	XDR8419-310N	Two-Post Distribution Rack
	BHH 191 UR	Horizontal Manager
	BHV H003	Vertical Manager