

## Wi-Fi

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Wi-Fi untethers people and their devices. Without having to plug into an Ethernet port, information and connection become mobile.

Wi-Fi is the name given to IEEE 802.11 wireless protocols, which launched in 1997. The technology uses available spectrum within the UHF band, as well as unlicensed 900 MHz, 2.4 GHz, 5 GHz, 6 GHz and 60 GHz bands.

New wireless standards continue to evolve to support faster connections for more devices at once. Each change brings faster speeds, lower latency and better user experiences.

For example, while Wi-Fi began in 1997 with data speeds of 2 Mb/s in the 2.4 GHz and 5 GHz unlicensed bands, Wi-Fi 6, or 802.11ax, is the latest Wi-Fi standard today. It's designed to support higher data rates with peak Gigabit speeds in crowded spaces, such as airports, stadiums, high-rise hotels, multi-family housing, entertainment venues and other dense environments.

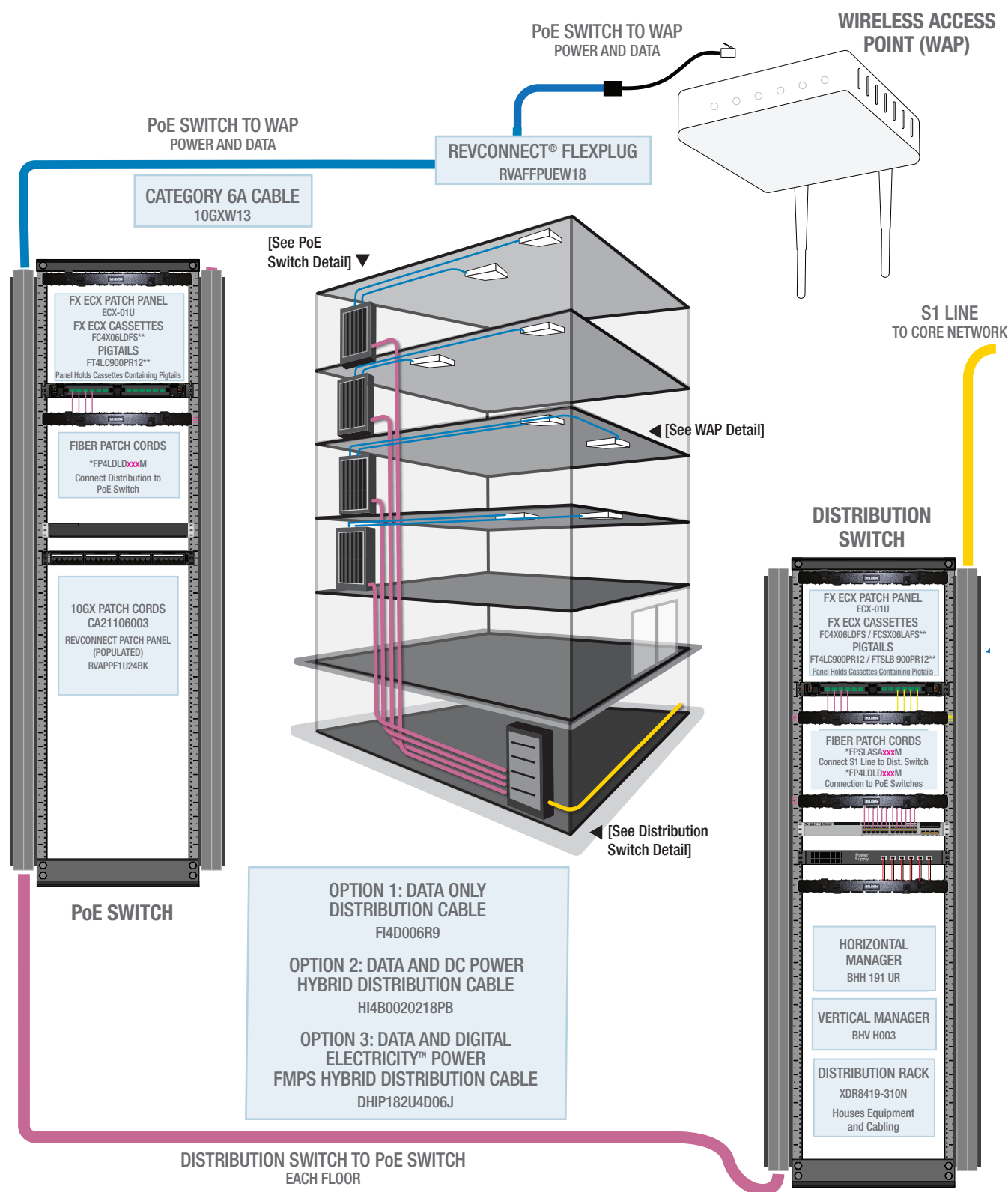
Trouble-free performance of a Wi-Fi network can only be guaranteed by using the correct wired infrastructure to support it.



### 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).

# Wi-Fi 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.

# Wi-Fi Example Checklist

	Belden Part Number	Description
 Fiber Cables	FI4D006P9	FX Indoor OM4 Distribution Tight Buffer, 6f OFNP, Erika Violet Jacket
	FD4D006P9	FX Indoor/Outdoor OM4 Distribution Tight Buffer, 6f OFNP, Black Jacket
	FI4D006A9	FX Indoor OM4 Distribution Tight Buffer, 6f OFCP, AIA, Erika Violet Jacket
	FD4D006A9	FX Indoor/Outdoor OM4 Distribution Tight Buffer, 6f OFCP, AIA, Black Jacket
 Pigtails	FXFSTOSPL	FX Fusion Splicer Kit
	FT4LC900PR12	FX Field-Term Pigtail, OM4, LC Simplex, Tight Buffer, 900 µm, 12f, 2 m
	FT4SC900PR12	FX Field-Term Pigtail, OM4, SC 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
 Patch Cords	FP4LDLD002M	FX Patch Cord, OM4, LC Duplex - LC Duplex, 2 m, A-to-B
	FP4SDSD002M	FX Patch Cord, OM4, SC Duplex - SC Duplex, 2 m, A-to-B
	FP4LSDSD002M	FX Patch Cord, OM4, LC Duplex - SC Duplex, 2 m, A-to-B
 Patch Panels	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-BRKTMTNT-0	FX ECX 4U Rack-Mounting Bracket, Flush
	ECX-LOCKKIT	FX ECX Door Lock Kit
 Cassettes	FC4X06LDFS	FX ECX Splice Cassette, OM4, LC Duplex, 6 Ports, 12f, Erika Violet
	FC4X12LDFS	FX ECX Splice Cassette, OM4, LC Duplex, 12 Ports, 24f, Erika Violet
	FC4X03SDFS	FX ECX Splice Cassette, OM4, SC Duplex, 3 Ports, 6f, Erika Violet
	FC4X06SDFS	FX ECX Splice Cassette, OM4, SC Duplex, 6 Ports, 12f, Erika Violet
 Wall-Mount Boxes	FW4MBS06LD	FX Multi-Box Field Term, OM4, 12f, LC Duplex, with Pigtails
	FW4MBF06LD	FX Multi-Box Field Term, OM4, 12f, LC Duplex, w/out Pigtails
	FW4MBP06LD	FX Multi-Box Field Term, OM4, 12f, LC Duplex, Pre-term
 FMPS Cables	DEIP162U	FMPS Copper Only, 16 AWG, 2 Cu Pairs, Plenum
	DEIP182U	FMPS Copper Only, 18 AWG, 2 Cu Pairs, Plenum
	DHIP162U4D06J	FMPS Hybrid, 16 AWG, 2 Cu Pairs, 6f, OM4, Distribution, Plenum
	DHIP182U4D06J	FMPS Hybrid, 18 AWG, 2 Cu Pairs, 6f, OM4, Distribution, Plenum
 Hybrid Copper-Fiber Cables	HI4B0020216PB	Indoor Hybrid, OM4, Breakout Cable, 2f, 2 Cu Pairs, 16 AWG, CMP-OF
	HI4B0020218PB	Indoor Hybrid, OM4, Breakout Cable, 2f, 2 Cu Pairs, 18 AWG, CMP-OF
 Racks and Managers	XDR8419-3122836	Four-Post Distribution Rack
	XDR8419-310N	Two-Post Distribution Rack
	BHH 191 UR	Horizontal Manager
	BHV H003	Vertical Manager