



BELDEN

DCX System

US Availability

Maximize signal integrity and usability with the DCX high-density end-to-end fiber infrastructure solution



Achieve fast, easy operation and management of terminations in fiber-dense environments



Emerging Technology Increases Fiber Connections

New technology like 5G and IoT, IP migration, the move to 4K content, the shift from 40G to 100G Ethernet and emerging 400G technologies are changing the landscape in data centers, broadcast environments and entertainment venues.

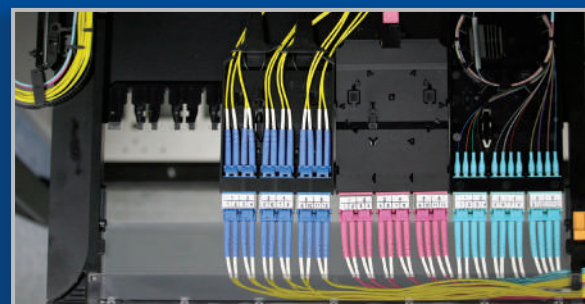
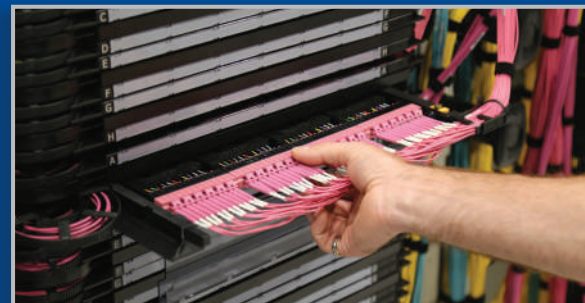
More fiber connections are needed to handle these unavoidable demands. To ensure uptime and efficient operation and maintenance, there's also an increasing need to effectively manage these growing numbers of fiber connections.

Introducing the DCX System

Handle large amounts of fiber connections and increase fiber density without compromising on ease of use. The new DCX System optimizes the ROI of your fiber infrastructure, reducing capital and operating expenses to offer lower total cost of ownership.

What makes the DCX System innovative?

- Extremely **high fiber termination density** available in a small footprint with 3,840 terminations per cabinet
- **Maximum signal integrity** through bend radius control for incoming and outgoing cables
- **Simple patch cord access** via pull-out trays and clearance around connectors
- **Futureproof functionality**, supporting migration from any combination of 8 or 12-fiber pre-terminated adapter frames and of Base-16 or Base-24 (soon to be released) pre-terminated adapter frames without infrastructure changes
- **Flexibility of termination methods**, including MPO trunk cables, multi-fiber trunk cables with LC connectors, fusion splicing with pigtails or splice-on connectors



DCX Optical Distribution Frame (ODF) Cabinets

DCX ODF Cabinets are fully configurable, front-access cabinets that serve as the main building block for a large fiber cross-connect or as a high-density fiber interconnect. They protect fiber connections with a lockable front door and side panels that can be unclipped from the inside. Assemble side by side and/or back to back for scalability.

DCX ODF Cabinet Components

Order as a basic cabinet frame and dress on-site with doors, sides and cable management accessories. Pre-configured cabinets can be upgraded with additional cable entry brackets, cable distribution brackets and patch cord spools as fiber terminations increase. A patch cord management storage module can be inserted between side-by-side assemblies to manage patch cords that run to other cabinets. In-cabinet channel kits can create horizontal patch cord management channels.



Unlimited scalability
with modular frames that act
as building blocks

Benefits

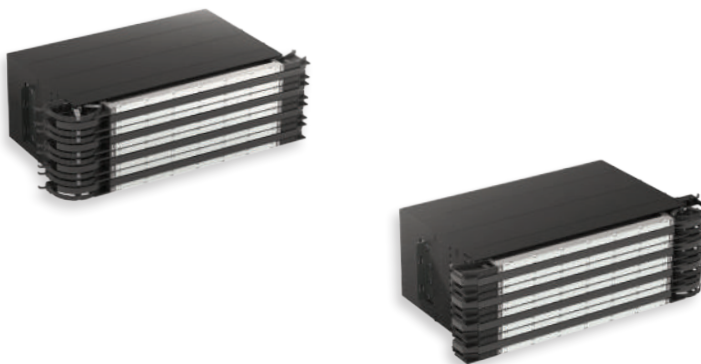
- Cable management accessories control bend radius of fiber cables and patch cords to protect signal integrity
- Place against a wall or in back-to-back arrangements to minimize use of floor space
- Simplify BOMs and save time during deployment with fully configured cabinets

Features

- Simple, easy-to-install accessories to dress incoming cables and patch cords
- Seismic frame made of 14-gauge steel meets Telcordia GR-63-CORE Zone 4 requirements
- Modular cabinets feature configurable item numbers

DCX Housings

DCX Housings are available in left-to-right and right-to-left cable flow configurations for optimized management. The housings have a front-access design with 8-trays that pull out for easy access to cables connected to the back of adapter frames and cassettes. Modular cassettes can be mixed on the same tray (Base-8, Base-12, Base-16 or Base-24), enabling easy and cost-effective migration and preventing density loss.



Benefits

- Enhance signal integrity due to built-in cable bend radius control and strain relief
- Simplify management with full access around each connection for easy insertion and removal
- Reduce human error and connection issues with labeling space at the front and inside the patch cord cover for easy port reference

Features

- DCX Housings with front-access design and capacity of 384 fiber terminations (using LC connectors)
- Built-in cable and patch cord management on every tray
- Articulated cable channels provide protection and bend radius control for fiber cables entering housings



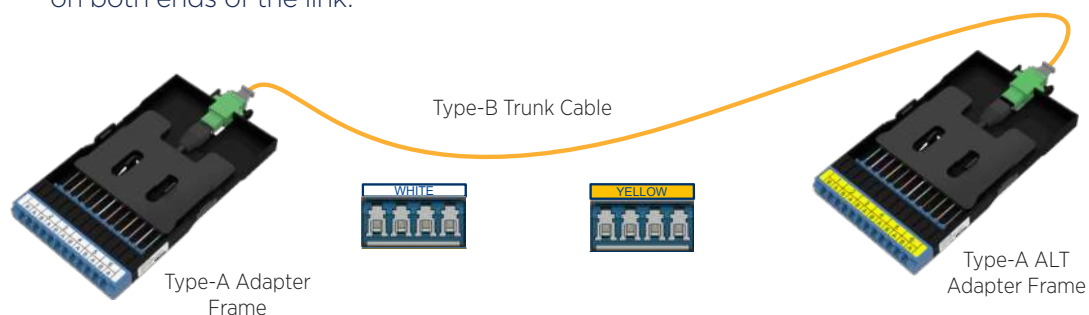
DCX Adapter Frames and Cassettes

DCX Adapter Frames and Cassettes have a modular, compact design that allows for assembly of two (Base-24), four (Base-12) or six (Base-8) cassettes per housing tray.



Efficient Fiber Polarity Management Using TIA-568 Method B (modified)

- Type-A cassettes maintain polarity (Tx to Rx) while using standard A-B patch cords on both ends of the fiber link.
- Alternate design maintains port sequence identical on both ends of the link.



Benefits

- Optimize system density regardless of termination method
- Reduce network downtime due to maintenance thanks to MPO pre-term adapter frame modularity; only 12 fibers are affected (as opposed to 24 or 36 fibers in other solutions)

Features

- Adapter frame available with LC, SC or MPO connector interface
- Pre-terminated adapter frames available in four-port (Base-8) and six-port (Base-12) configurations
- Splice cassettes available empty or preloaded with pigtails, splice holder and protectors



DCXT11-44121-33 - DCX Cabinet, Left-Right (10-housing Cabinet*)



DCXT21-44121-33 - DCX Cabinet, Right-Left (10-housing Cabinet*)



DCX-HINB KIT01B



DCX-HINC-KIT01W

DCX ODF Cabinets | Seismic 84x36x15 | 10 Housing

10 Cable Distribution Brackets, 10 Patch Cord Spools

Description	Maximum Capacity		Belden Part Number
	DCX Housings	LC Duplex Ports (fibers)	
Left-Right, White, No Top Panel, No Bottom Panel, No Doors, No Side Panel, No Real Panel	10	1920 (3840)	DCXT11-00000-33
Right-Left, White, No Top Panel, No Bottom Panel, No Doors, No Side Panel, No Real Panel	10	1920 (3840)	DCXT21-00000-33
Left-Right, White, Brush + Top Cable Entry Brackets, Brush + Bottom Cable Entry Brackets, Bifold Plexi Door, Solid Side Panel, Full Rear Panel	10	1920 (3840)	DCXT11-44121-33
Right-Left, White, Brush + Top Cable Entry Brackets, Brush + Bottom Cable Entry Brackets, Bifold Plexi Door, Solid Side Panel, Full Rear Panel	10	1920 (3840)	DCXT21-44121-33
Left-Right, White, Brush + Top Cable Entry Brackets, Brush + Bottom Cable Entry Brackets, Bifold Plexi Door, No Side Panel, Full Rear Panel	10	1920 (3840)	DCXT11-44101-33
Right-Left, White, Brush + Top Cable Entry Brackets, Brush + Bottom Cable Entry Brackets, Bifold Plexi Door, No Side Panel, Full Rear Panel	10	1920 (3840)	DCXT21-44101-33

DCX ODF Accessories

Description	Belden Part Number
DCX Cable Attachment Brackets - Top (4 Brackets for 24 Cables)	DCX-TOPE-KIT03W
DCX Cable Attach Brackets - Bottom (4 Brackets for 24 Cables) Office White	DCX-BOTE-KIT02W
DCX Cable Distribution Attachment Kit (1 Bracket w/ (2) Plastic Holders Up to 24 LPM Transition Per Holder) Black	DCX-CABV-KIT01B
DCX Patch Cord Spool Kit (1 Telescopic Spool + Management Bar) Black	DCX-SPOO-KIT-02B
DCX Horizontal In-Cabinet Channel Kit (One Patch Cord Tray) Central Office White	DCX-HINC-KIT01W
DCX Horizontal In-Cabinet Short Channel Kit (For End Cabinet) Central Office White	DCX-HINC-KIT02W
DCX Patch Cord Storage Module Central Office White w/ Black Door w/ 15 Spools	DCX-PCST-MOD01W
DCX Horizontal In-Cabinet Front-to-Back Patch Cord Bridge Black	DCX-HINB-KIT01B

DCX Cabinets SmartPart Configurator

1. Choose Type		2. Choose Cable Flow		3. Choose Color		4. Choose Top Panel		5. Choose Bottom Panel		6. Choose Door		7. Choose Side Panel		8. Choose Rear Panel		9. Choose Attachment		10. Choose Spools	
DCX		T		1		1		4		4		1		2		1		3	
Type		Cable Flow		Color		Top Panel		Bottom Panel		Doors		Side Panel		Rear Panel		Cable Attachment		Spools	
T	10 Housings 84x36x15	1	Left-Right	1	White	0	None	0	None	0	None	0	None	0	None	0	None	0	None
		2	Right-Left	2	Black	1	Blank	1	Blank	1	Bifold-Plexi	1	Plexi	1	Full	3	10 Cable Distribution Brackets	3	10 Spools
						4	Brush + 10 Top Cable Brackets	4	Brush + 8 Angle Bottom Cable Brackets	2	Bifold-Perf	2	Solid	2	Cable Management				
										3	Bifold-Solid								

Please Note:

- By default, top, bottom, side and rear panels are powder coated to match frame color.
- By default, door, cable distribution brackets and spool metal supports are black medium texture.
- Standard white enclosures will have black doors and standard black enclosures will have black doors. Consult factory for special color options and/or enclosure configurations.

DCX Housings

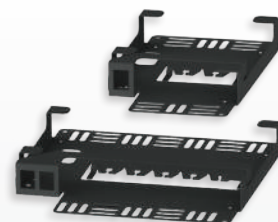
Description	Number of Modules		Total LC Duplex Ports	Cabinet Compatibility	Belden Part Number
Base-12	Base-8				
384-Fiber, Left-Right Cable Flow, with 8 Trays, Trunk & Patch Management	32	48	192	10 Housing	DCX-384F-LR
384F-Fiber, Right-Left Cable Flow, with 8 Trays, Trunk & Patch Management	32	48	192	10 Housing	DCX-384F-RL



DCX-384F-LR and DCX-384F-RL

Zero U Trays

Description	Number of Modules			Belden Part Number
	Base-24	Base-12	Base-8	
DCX Zero U Tray, Small with Magnets for 1 DCX Cassette Base-12, Black	—	1	1	DCX-ZUTR-S
DCX Zero U Bracket, Large with Magnets for 2 DCX Cassettes Base-12, Black	1	2	3	DCX-ZUTR-L



DCX-ZUTR-S and DCX-ZUTR-L

Rack-Mount Housings

Description	Number of Modules		Total LC Duplex Ports	Belden Part Number
Base-12	Base-8			
DCX 1U Patch Panel Housing 48-Port (1 Tray) Empty, Black Finish	8	12	48	DCX-01RM-048P
DCX 2U Patch Panel Housing 96-Port (2 Trays) Empty, Black Finish	16	24	96	DCX-02RM-096P
DCX 4U Patch Panel Housing 192-Port (4 Trays) Empty, Black Finish	32	48	192	DCX-04RM-192P



DCX-02RM-096P

DCX Adapter Frames

Description	Belden Part Number				
Patch Ports (fibers)	OM3 Aqua Adapters	OM4 Erika Violet Adapters	OM5 Lime Green Adapters	OS2/UPC Blue Adapters	OS2/APC Green Adapters
MPO					
4 (48)	FF3D04MP	FF4D04MP	FF5D04MP	—	FFSD04MP
6 (72)	FF3D06MP	FF4D06MP	FF5D06MP	—	FFSD06MP
LC Duplex					
4 (8)	FF3D04LD	FF4D04LD	FF5D04LD	FFSD04LD	FFSD04LA
6 (12)	FF3D06LD	FF4D06LD	FF5D06LD	FFSD06LD	FFSD06LA
SC Duplex					
3 (6)	FF3D03SD	FF4D03SD	—	FFSD03SD	FFSD03SA



FF4D04MP and FFSD06LD

DCX Adapter Frames SmartPart Configurator

1. Choose Fiber Type	2. Choose Product Family	3. Choose Port Count (Patch Side)	4. Choose Connector	
FF	3	D	04	LD
Type	Product Family	Port Count	Connector	
3 OM3	D DCX	04 4-Port	LD LC/UPC	
4 OM4		06 6-Port	LA LC/APC	
5 OM5			SD SC/UPC	
S OS2			SA SC/APC	
			MP MPO	

DCX Pre-Terminated Adapter Frames (MPO-LC)

Belden Part Number					
Description Patch Ports (fibers)	OM3 Aqua Adapters	OM4 Erika Violet Adapters	OM5 Lime Green Adapters	SM Blue Adapters	SM/APC Green Adapters
6 (12) Type-A	FF3D06LDMFAA	FF4D06LDMFAE	FF5D06LDMFAL	FFSD06LDMFAB	FFSD06LAMFAG
6 (12) Type-A ALT	FF3D06LDMF1A	FF4D06LDMF1E	FF5D06LDMF1L	FFSD06LDMF1B	FFSD06LAMF1G
4 (8)	FF3D04LD4F	FF4D04LD4F	FF5D04LD4F	FFSD04LD4F	FFSD04LA4F



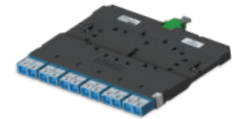
FF4D06LDMFAE and
FF4D04LD4F

DCX Pre-Terminated Adapter Frames *SmartPart* Configurator

1. Choose Fiber Type	2. Choose Product Family	3. Choose Port Count (Patch Side)	4. Choose Connector (Patch Side)	5. Choose Connector (Trunk Side)	6. Choose Type	7. Choose Color
FF	4	D	06	LD	MF	A
Fiber Type	Product Family	Port Count (Patch Side)	Connector (Patch Side)	Connector (Trunk Side)	Type	Color
3 OM3	D DCX	04 4-port	LD LC Duplex	MF MPO-12 (12f) Female	A Type-A	A Aqua
4 OM4		06 6-port	LA LC/APC Duplex	MM MPO-12 (12m) Male	1 Type-A ALT	E Erika Violet
5 OM5				4F MPO-12 (8f) Female	4 SR4	B Blue
S OS2				4M MPO-12 (8m) Male		G Green
						L Lime Green

DCX Pre-Terminated Cassettes (MPO-SC)

Belden Part Number						
Description	Patch Ports (fibers)	OM3 Aqua Adapters	OM4 Erika Violet Adapters	OM5 Lime Green Adapters	SM Blue Adapters	SM/APC Green Adapters
SC Duplex to MPO-12 (12f) Female	6 (12)	FC3D06SDMF	FC4D06SDMF	-	FCSD06SDMF	FCSD06SAMF
SC Duplex to MPO-12 (8f) Female	4 (8)	FC3D04SD4F	FC4D04SD4F	-	FCSD04SD4F	FCSD04SA4F



FCSD06SDMF

DCX Splice Cassettes

Belden Part Number						
Description	Patch Ports (fibers)	OM3 Aqua Adapters	OM4 Erika Violet Adapters	OM5 Lime Green Adapters	SM Blue Adapters	SM/APC Green Adapters
LC Duplex - Includes 250 µm discreet pigtails, splice tray and heat shrink splice protector sleeves	6 (12)	FC3D06LDFF	FC4D06LDFF	FC5D06LDFF	FCSD06LDFF	FCSD06LAFF
	12 (24)	FC3D12LDFF	FC4D12LDFF	FC5D12LDFF	FCSD12LDFF	FCSD12LAFF
LC Duplex - Includes 250 µm ribbon pigtails, splice tray and heat shrink splice protector sleeves	6 (12)	FC3D06LDFM	FC4D06LDFM	FC5D06LDFM	FCSD06LDFM	FCSD06LAFM
	12 (24)	FC3D12LDFM	FC4D12LDFM	FC5D12LDFM	FCSD12LDFM	FCSD12LAFM
LC Duplex - Pigtails, trays, protector sleeves sold separately	6 (12)	FC3D06LDFFS	FC4D06LDFFS	FC5D06LDFFS	FCSD06LDFFS	FCSD06LAFFS
	12 (24)	FC3D12LDFFS	FC4D12LDFFS	FC5D12LDFFS	FCSD12LDFFS	FCSD12LAFFS
SC Duplex - Includes 250 µm discreet pigtails, splice tray and heat shrink splice protector sleeves	6 (12)	FC3D06SDFF	FC4D06SDFF	-	FCSD06SDFF	FCSD06SAFF
SC Duplex - Includes 250 µm ribbon pigtails, splice tray and heat shrink splice protector sleeves	6 (12)	FC3D06SDFM	FC4D06SDFM	-	FCSD06SDFM	FCSD06SAFM
SC Duplex - Pigtails, trays, protector sleeves sold separately	6 (12)	FC3D06SDFFS	FC4D06SDFFS	-	FCSD06SDFFS	FCSD06SAFFS



FCSD12LDFF

DCX Splice Cassettes *SmartPart* Configurator

1. Choose Fiber Type	2. Choose Product Family	3. Choose Port Count (Patch Side)	4. Choose Connector (Patch Side)	5. Choose Connector (Trunk Side)	6. Choose Type	7. Choose Color
FC	S	D	06	LA	FP	X
Fiber Type	Product Family	Port Count (Patch Side)	Connector (Patch Side)	Connector (Trunk Side)	Type	Color
3 OM3	D DCX	06 6-port	LD LC Duplex	FP Preloaded Stranded Pigtails	X Pair Flipped	A Aqua
4 OM4		12 12-port*	LA LC/APC Duplex	FM Preloaded w/Ribbon Pigtail		E Erika Violet
5 OM5			SD SC Duplex	FS Empty		B Blue
S OS2			SA SC/APC Duplex			G Green
						L Lime Green

* 12-port only available with LA and LD



FiberExpress Patch Cords *SmartPart* Configurator

1. Choose Fiber Type		2. Choose Connector 1		3. Choose Connector 2		4. Choose Length*		5. Choose Fire Rating		6. Choose Cable Construction		7. Choose Polarity		8. Choose Jacket Color			
FP		3		LD		LD		03M5		R		1		X		A	
Fiber Type		Connector 1		Connector 2		Length*		Fire Rating		Cable Construction		Polarity		Jacket Color			
3 OM3		LD LC Duplex		LD LC Duplex		003M to 100M M Meters		R Riser		9 Simplex Cord 1.6 mm		X A/B (Cross)		Y Yellow			
4 OM4		LC LC Simplex		LC LC Simplex		*use M as decimal		P Plenum		1 Duplex Zipcord 1.6 mm		S A/A (Straight)		A Aqua			
4 OM4		LA LC/APC Duplex		LA LC/APC Duplex						6 Round 2.0 mm		A Type-A		E Erika Violet			
S OS2		LB LC/APC Simplex		LB LC/APC Simplex								B Type-B		L Lime Green			
		SD SC Duplex		SD SC Duplex													
		SC SC Simplex		SC SC Simplex													
		SA SC/APC Duplex		SA SC/APC Duplex													
		SB SC/APC Simplex		SB SC/APC Simplex													
		4F MPO-12 (F) Base-8		4F MPO-12 (F) Base-8													
		MF MPO-12 (F) Base-12		MF MPO-12 (F) Base-12													

Examples:

FP3LDLD03M5R1XY - FX Patch Cord, OS2, LC Duplex - LC Duplex, 3.5 m, OFNR, Duplex Zip 1.6 mm, A-To-B, Yellow Jacket

FP3LBLB03M5R9SY - FX Patch Cord, OS2, LC Simplex/APC - LC Simplex/APC, 3.5 m, OFNR, Simplex 1.6 mm, A-To-A, Yellow Jacket

FP44F4F15M5P6BE - FX Patch Cord, OM4, MPO-12 Base-8 (F) - MPO-12 Base-8 (F), 15.5 m, OFNP, Round 2.0 mm, Type-B, Erika Violet Jacket

FP3LDLD03M5R1XA - FX Patch Cord, OM3, LC Duplex - LC Duplex, 3.5 m, OFNR, Duplex Zip 1.6 mm, A-To-B, Aqua Jacket



FiberExpress Flexible Ribbon Cables *SmartPart* Configurator

1. Choose FX Fiber Cable	2. Choose Fiber Type	3. Choose Family	4. Choose Fiber Count	5. Choose Fire Rating	6. Choose Subunit Type/Configuration
F1	S	R	144	P	2
FX Fiber Cable	Type	Family	Fiber Count	Fire Rating	Subunit Type
FI Indoor Cable	4 OM4	R Flexible Ribbon Cable	012 12 Fibers	Plenum Group	0 250 µm, Non-Unitized
FD Indoor/Outdoor Cable	S OS2		024 24 Fibers	P Plenum (OFNP)	2 3 mm x 12F
			036 36 Fibers	A Plenum Interlocked Aluminum Armor (OFCP)	5 3 mm x 24F
			048 48 Fibers	Riser Group	Y 4.5 mm x 72F
			064 64 Fibers	R Riser (OFNR)	Z 7.0 mm x 144F
			072 72 Fibers	F Riser Interlocked Aluminum Armor (OFCR)	
			096 96 Fibers	LSZH/Riser Group	
			144 144 Fibers	L LSZH/Riser (OFNR)	
			288 288 Fibers	C LSZH/Riser Interlocked Aluminum Armor (OFCR)	
			576 576 Fibers		
			864 864 Fibers		

Notes:

- 1.) Plenum rating cable is only available in indoor cable 12-288f
- 2.) Riser/LSZH rating cable is only available in indoor cable 12-288f, Fiber count above 288f is only available in riser rating
- 3.) Indoor/outdoor cable is only available in riser rating 12-288f

Examples:

FISR024P0 - FX Indoor Flexible Ribbon OS2, 24 Fibers OFNP Double Jacket (Non-unitized)

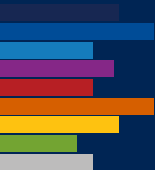
FISR288P5 - FX Indoor Flexible Ribbon OS2, 288 Fibers OFNP Subunits 3.0 mm (24F)

FISR144L2 - FX Indoor Flexible Ribbon OS2, 144 Fibers LSZH/OFNR Subunits 3.0 mm (12F)

FISR576RZ - FX Indoor Flexible Ribbon OS2, 576 Fibers OFNR Subunits 7.0 mm (144F)

FDSR072R2 - FX Indoor/Outdoor Flexible Ribbon OS2, 72 Fibers OFNR Subunits 3.0 mm (12F)





Maximize signal integrity and usability
with the high-density DCX end-to-end
fiber infrastructure solution



Find out more at
belden.com/dcxsolution

KEY NORTH AMERICAN LOCATIONS

UNITED STATES

Division Headquarters

1320 City Center Drive, Suite 100
Carmel, IN 46032
USA
Phone: 317-818-6300
Inside Sales: 800-235-3361
Fax: 317-818-6382

CANADA

National Business Center

2310 Alfred-Nobel
St-Laurent Quebec H4S 2B4
Canada
Phone: 514-822-2345
Inside Sales: 800-235-3361
Fax: 514-822-7979

MEXICO

Regional Office

Av. de los Nogales
No. 290 Fracc. San Carlos,
Heroica Nogales C.P. 84090
Nogales, Sonora México
Phone: 52 0264 2060
Fax: 52 0264 2126

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