Fiber Optics Technology

Company Intro. *for 2017*

FOSTEC INC.

FOSTEC

INTRODUCTION

FOSTEC Inc. is a fiber optic components, cables and equipment manufacturer in South Korea.

Being founded in **1998**, with 15 years history FOSTEC could expand its market to more than **30 countries** and keeps capturing customer's satisfaction by its high quality products, affordable prices and professional service.

FOSTEC has several distributors in **U.A.E, Qatar, Mexico and Kazakhstan etc**. The company had won several big tenders over the years in **Middle East, CIS, Asia, and Europe.**

FOSTEC **is ISO 9001, 14001** certified company, it's compliant with **RoHS, OHSAS,** and also member of **KOTRA Seal of Excellence and INNOBIZ.**

FOSTEC always strives for excellence and keep developing its production and service. This year FOSTEC has opened its second factory in Korea.

With numerous export awards and loyal customers FOSTEC's vision is to become number one choice for customers in fiber optic industry!

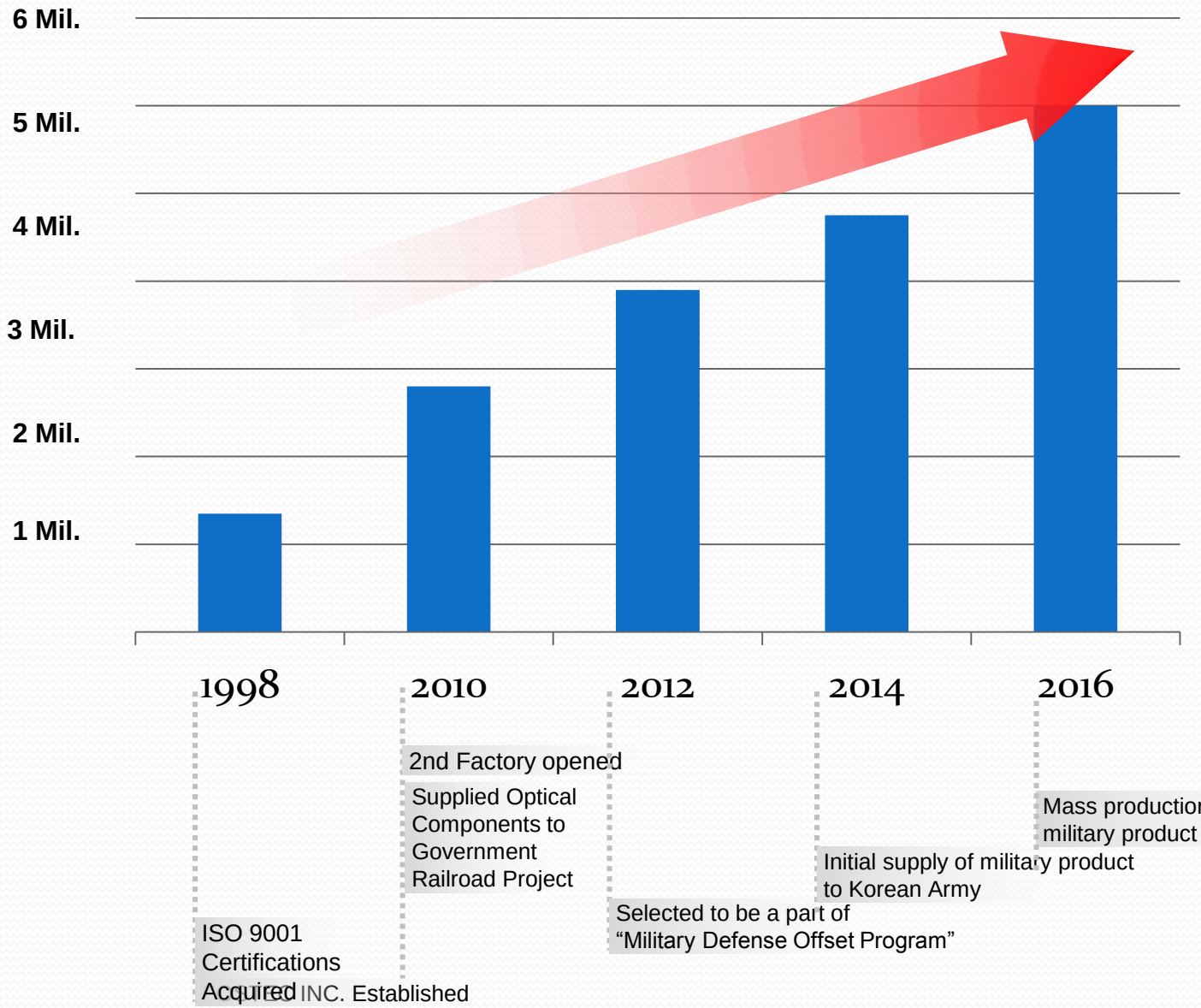
Company Profile

Name	FOSTEC INC.
Business Area	• Fiber optics technology • Patch cord./ Splitter / OFD • Cable • Etc.
Employee	80 (As of the end of 2016)
Location	**HEAD OFFICE** (15655) Fostec Bldg, 40, Emtibeui 20-ro 12beon-gil, Danwon-gu, Ansan-si, Gyeonggi-do, Korea **Tel.** (+82)-31-318-9350 **Fax.** (+82)-31-318-9352

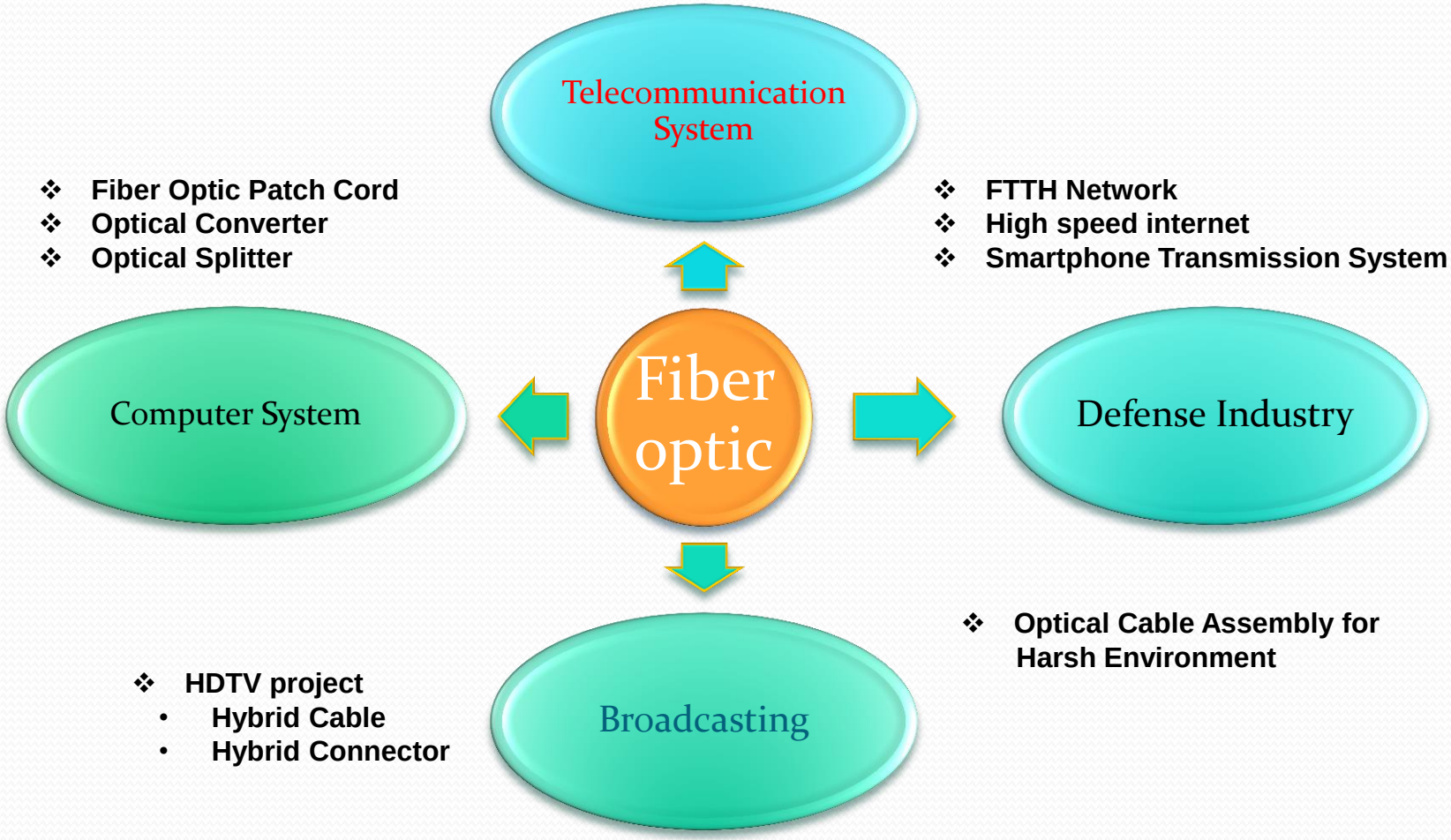
Company History

1998. 02. FOSTEC was Established
2001. 04. Opening of the Manufacturing Factory
2002. 03. A Technical Assistance Agreement with FURUKAWA CO. Japan was Reached
2002. 07. Supplied Optical Components to Government Railroad Project
2002. 10. The HDTV Optical Connector technology was approved by LEMO F.O.U.R
2003. 05. Development of the Digital Home System (HDTV, IP STB, DVD, Digital Monitor, 5.1CHSound)
2004. 03. Completion of a Multiple Channel Connector for Industrial use, Schools, and Research Institutes
2004. 08. ISO 9001 Certifications Acquired
2005. 07. ISO 14001 Certifications Acquired
2006. 01. Establishment of the Laboratory
2006. 05. Development of a Fiber Optic Connector for Special Projects to Accompany the Fiber Optic Cable
2006. 07. Acquired a license for Fiber Optic MIKE & FOREX from the Korea Industrial Property Office
2006. 12. Registration of Cooperation Enterprise with SAMSUNG-NETWORKS
2007. 01. Yearly Contract Agreement with LG
2008. 06. Won Government Contract with Korean Army for Communications Project
2009. 07. Acquired CE Certification for SM and MM media converters
2010. 10. International Telecommunications construction license registration (Overseas Construction Association)
2010.11. Optoelectronic hybrid cable patent (Patent Office)
2010.02. Optoelectronic hybrid connector patent (Patent Office)
2010.05. OHSAS 18001 Certification acquired
2010.07. 2nd Factory opened
2012.05. Selected to be a part of “Military Defense Offset Program”
2013. 03. Exhibitor in International Fiber Optic Exhibition OFCNFOEC 2012 (LA, USA)
2013. 05. Exhibitor in Broadcast Audio & Lighting Equipment Show, KOBA (Seoul, Korea)
2014. 03. Exhibitor in International Fiber Optic Exhibition OFCNFOEC 2013 (San Francisco, USA)
2014. 05. Exhibitor in Broadcast Audio & Lighting Equipment Show, KOBA (Seoul, Korea)
2014. 06. Exhibitor in Broadcast Asia 2014. (Singapore)
2014. 10 Exhibitor in Photonics Korea 2014 (Gwangju, Korea)
2015. 03. Exhibitor in International Fiber Optic Exhibition OFCNFOEC 2015 (LA, USA)
2015. 05. Exhibitor in Broadcast Audio & Lighting Equipment Show, KOBA (Seoul, Korea)
2015. 12. Exhibitor in Hi-Tech Defense Industry Fair (Daejeon, Korea)
2016. 08 Office Relocation

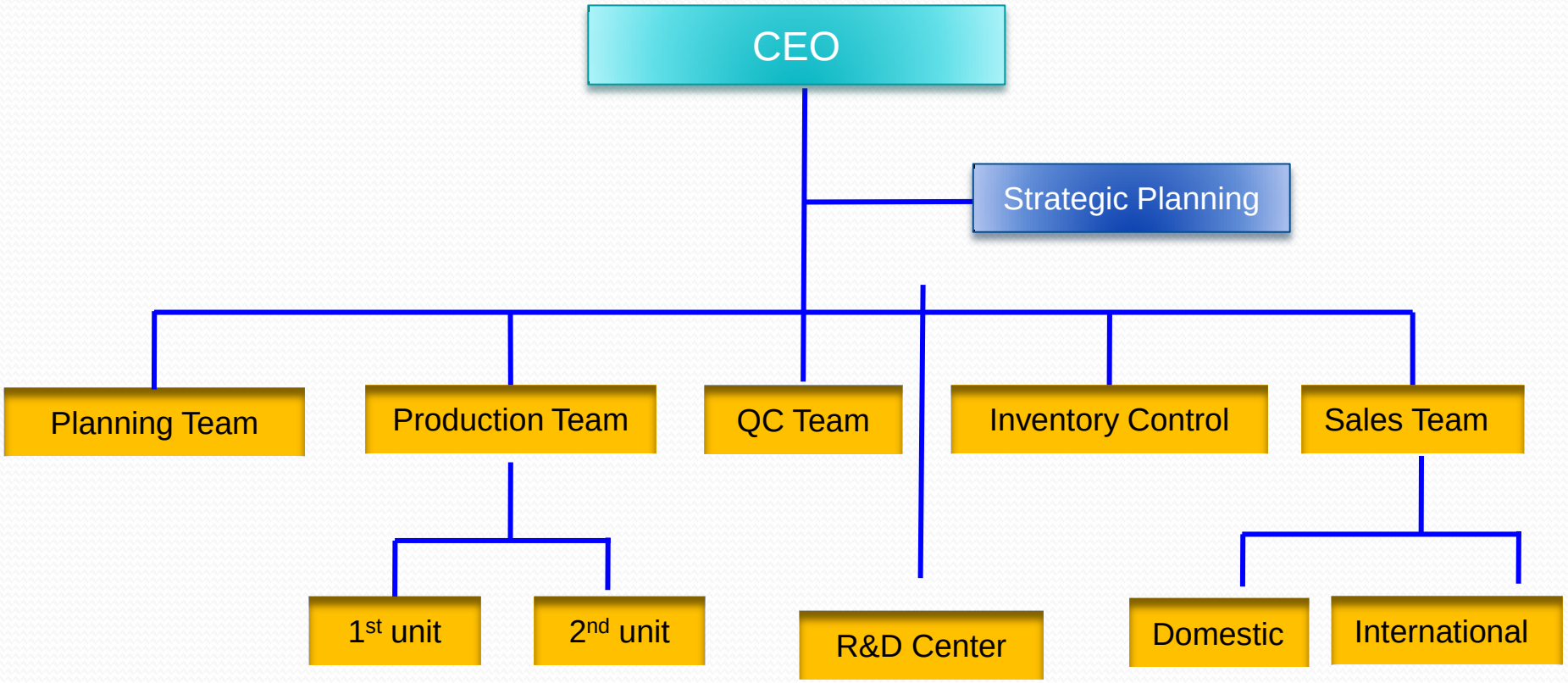
Sales Revenue & History



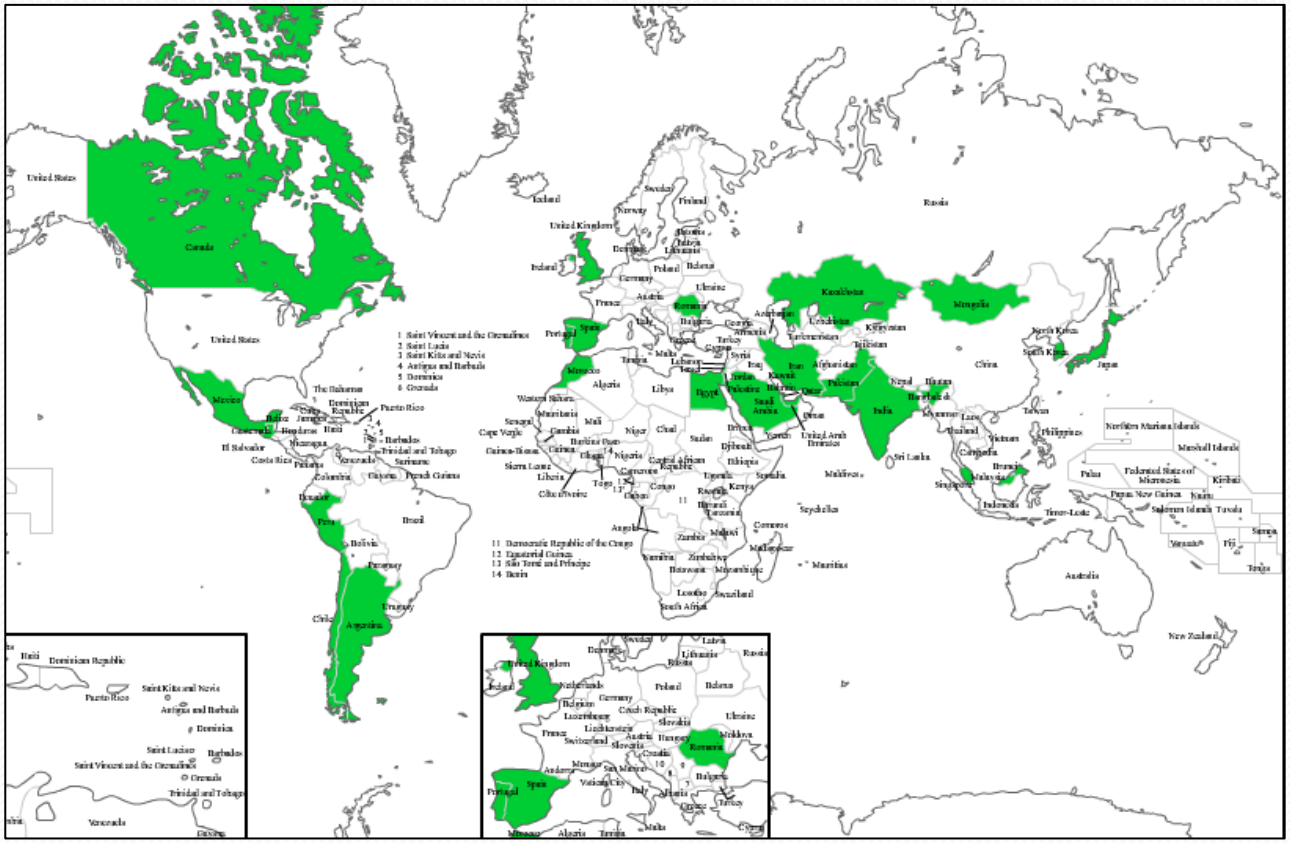
Business Model



Organization



Global Presence



Present in more than 30 countries

Working with over 40 different companies

Official Distributors: U.A.E & Saudi Arabia

FOSTEC

Local Clientele

SAMSUNG SDS

KBS

Hanwha THALES

MBC

LIG Nex1 Co., Ltd

SBS

Huneed Technologies

EBS

SK telecom

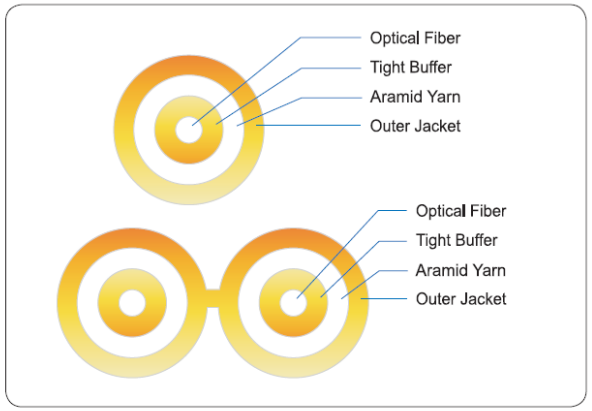
kt

LS Industrial Systems

Products Fiber Optic Cable

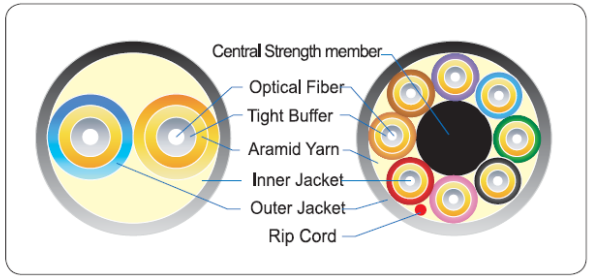
Simplex and Duplex Cable

ITEM	Outer Diameter(mm)	Weight(kg/km)	Max.Tensile Load(kg)
Simplex	1.6	2.5	10
	2.0	5.0	15
	2.4	8.5	20
	3.0	11.5	30
Duplex	1.6 X 3.2	6	20
	2.0 X 4.0	8	30
	2.4 X 4.8	10	40
	3.0 X 6.1	18	50



Breakout Cable

ITEM	Outer Diameter(mm)	Weight(kg/km)	Max.Tensile Load(kg)
2	6.0	50	80
4	8.5	70	80
6	10.0	100	100
8	12.0	120	120
12	14.0	190	180



Products Fiber Optic Cable

Simplex and Duplex Cable

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Simplex	1.6	2.5	10
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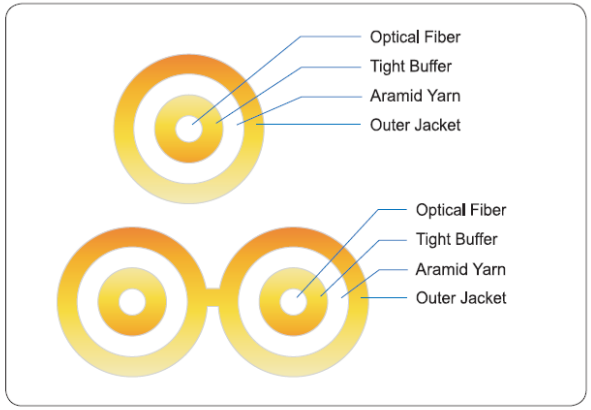
	2.4	8.5	20
	3.0	11.5	30
Duplex	1.6 X 3.2	6	20
	2.0 X 4.0	8	30
	2.4 X 4.8	10	40
	3.0 X 6.1	18	50



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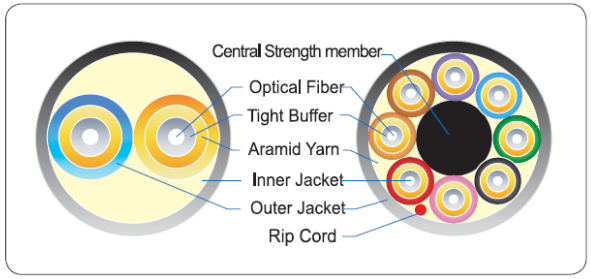
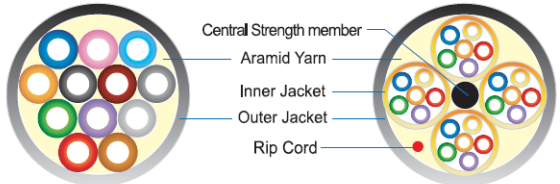


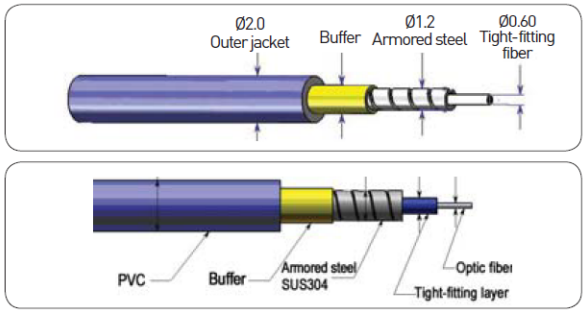
Products Fiber Optic Cable

Distribution Cable

ITEM	Outer Diameter(mm)	Weight(kg/km)	Max.Tensile Load(kg)
4	5.5	25	66
6	6.0	30	66
8	6.5	35	66
12	7.5	45	80
24	15.0	165	100
36	16.0	190	130
48	18.5	260	180



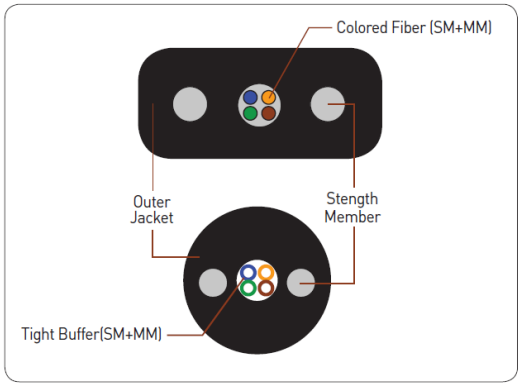
Armored Cable



Inspection Index [1550mm]	Term		Crush		Concussion	Bend
	Short-term	Long-term	Short-term	Long-term		
	≤0.03 dB	≤0.01 dB	≤0.03 dB	≤0.01 dB	Optic Fiber don't break off	≤0.03 dB
ø 2.0	>300N	>100N	>5000N / 100 mm	>3000N / 100 mm	4.5 Nm, 5 times	15D, 1000 times
ø 3.0	>500N	>250N	>5000N / 100 mm	>3000N / 100 mm	4.5 Nm, 5 times	15D, 1000 times

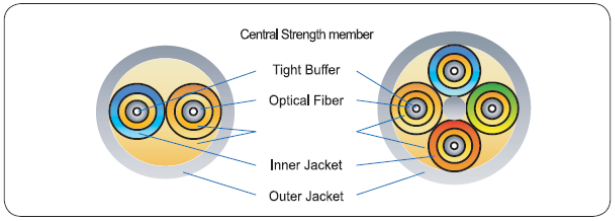
Products Fiber Optic Cable

Drop Cable



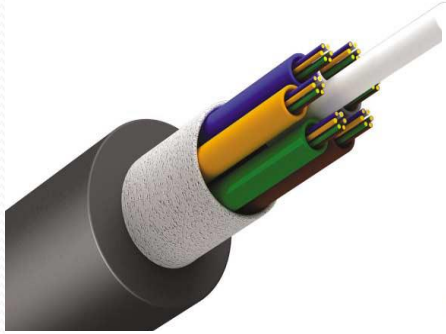
ITEM		Rectangle Shape		Cycle Shape	
Number of Cores		up to 6	up to 2	up to 6	up to 4
Dimension or Outer Diameter(mm)		2(H) x 3.1(W)	4(H) x 8(W)	7.0	6.8
Weight(kg/km)		25	40	45	40
Tension Member	Material /Size	Strength Member(Steel Wire or FRP) /1.0mm x 2(ea)			
Sheath Material		PVC, PE, PU, LSZH			
Max. Tensile Load(kg)		150		150	

Military Tactical Cable

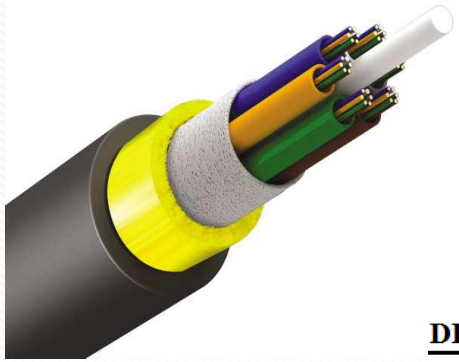


Number of core	Outer Diameter (mm)	Weight (kg/km)	Max.Tensile Load (kg)	Min. Bending Radius (mm)	
				Installation	Operation
2	6.5	35	200	D×20	D×10
4	7.0	45	200		

Fiber Optic Outdoor Cable



① Loose Tube ② Optical fibers ③ Central strength member ④ Core filling ⑤ Ripcord ⑥ Core wrapping tape ⑦ Outer strength member ⑧ Outer PE jacket



① Loose Tube ② Optical fibers ③ Central strength member ④ Core filling ⑤ Ripcord ⑥ Core wrapping tape ⑦ Aramid yarns layer ⑧ Outer HDPE jacket

DESCRIPTION / FEATURES

- Different fiber types available
- All dielectric Single jacket, UV stabilized, Water bl
- Excellent mechanical and environmental performan
- Light weight and flexibility
- High tensile strength available

APPLICATIONS

- Outdoor duct, aerial lashing applications
- Areas with lightning risk, Vicinities of power line plant, Strong electromagnetic field
- High capacity
- Long haul communication system
- Subscriber & Local Area Network
- Voice, data, video & imaging system

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Fiber Optic Patch Cord

Applications

- Telecommunication networks
- Local Area Networks
- CATV networks
- Active device termination
- Data system networks

Features & Benefits

- Compliant with: IEC, JIS, Telcordia
- Customer length
- Standard length of SC, FC and ST assemblies in stock
- Minimum loss

Specification

Parameter	Condition	Value [dB]		
		Min	Typical	Max
Insertion Loss			< 0.15	< 0.30
Return Loss	SPC	> 40	> 45	
	UPC	> 50	> 55	
	APC	> 60	> 65	
Mating Durability	500 times			< 0.20
Temperature Cycling	-40℃ ~ + 85℃			< 0.20
Humidity Cycling	75℃, RH 95%			< 0.20
Vibration	10~55Hz [3 Axis]			< 0.20
Impact	1.5m drop, 8 times			< 0.20

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Fiber Optic Attenuator

Plug type Fixed Attenuator

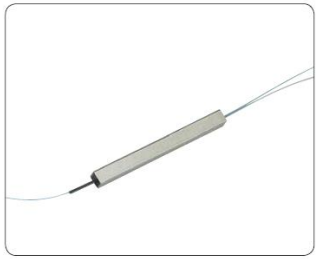
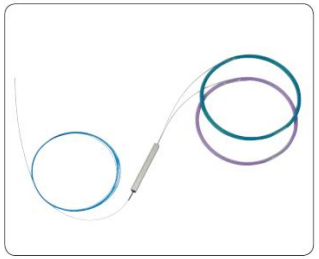
Line type Fixed Attenuator

Line type Variable Attenuator

Specification

Parameter	Condition	Value [dB]		
		Min	Typical	Max
Attenuation			1 ~ 10	
			15, 20	
Return Loss	SPC	> 40	> 45	
	UPC	> 50	> 55	
	APC	> 60	> 65	
Attenuation Accuracy	1 ~ 10		±0.5	
	15 ~ 20		±1.0	
Operating Wavelength [nm]	1310 and 1550			
Operating Temperature	-40℃ ~ +85℃			
Humidity	75℃, RH 95%			

PLC Splitter



Specification

Parameter	N x 4	N x 8	N x 16	N x 32
Fiber	SMF-28			
Operating Wavelength [nm]	1260 ~ 1620			
Insertion Loss [dB]	≤ 7.4	≤ 10.7	≤ 13.9	≤ 17.5
Uniformity [dB]	≤ 0.5	≤ 0.8	≤ 1.3	≤ 1.5
Polarization Dependent Loss [dB]	0.2	0.2	0.3	0.3
Return Loss [dB]	> 50			
Directivity [dB]	> 55			
Operating Temperature	-40℃ ~ +85℃			
Storage Temperature	-60℃ ~ +85℃			
Dimensions [L x W x H] [mm]	40 x 4 x 4		55 x 7 x 4	

* Note : All measurement were tested at room temperature without connectors.

Applications

- FTTx
- LAN, WAN and Metro networks
- Analog / Digital Passive Optical Networks
- CATV Networks
- Other applications in fiber optic systems

Features & Benefits

- Compact design
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Wide operating temperature range
- Customized packaging and configuration

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CWDM & DWDM

Specification

Parameter		Value
Operating Wavelength[nm]		1260-1620
Channel No.		2 / 4 / 8 / 16 / Other
Center wavelength[nm]		1310 / 1490 / 1550 / 1470 ~ 1620
Passband width[nm]		CWDM : ± 7.5 DWDM : 0.22
Passband flatness [dB]		≤ 0.5
Insertion Loss	COM→Pass Port [dB]	≤ 2.8
Isolation	COM→Pass Port [dB]	Adjacent channel isolation : 30
	COM→Pass Port [dB]	Non-adjacent channel isolation : 40
Polarization Dependent Loss [dB]		≤ 0.15
Return Loss [dB]		≥ 50
Directivity [dB]		≥ 55
Optical Power [mW]		≤ 500
Fiber Type		SMF – 28
Operating Temperature [℃]		-10 ~ +70
Storage Temperature [℃]		-40 ~ +85
Dimension [mm]		100 x 80 x 10 / 140 x 115 x 18

Applications

- Line monitoring
- WDM Network
- Telecommunication
- Cellular application
- Fiber optical amplifier

Features & Benefits

- Low insertion loss
- Wide pass band
- High channel isolation
- High stability and reliability
- Access Network

Converters & Switches

Fiber to UTP Converter

Fiber Optic Ethernet Switches

Measuring Device

Light Source

Features & Benefits

- Provides 1~6 wavelengths output which can be optional according to customers' needs
- CW 2Hz modulation output at 650nm, and CW, 270Hz, 1KHz, 2KHz modulation output at other wavelengths.
- High stability of the output power
- Stable output wavelength
- Backlight LCD display supports night operation
- Low battery power indication

Applications

- Telecom Maintenance
- CATV Maintenance
- Fiber Optic lab testing
- Other Fiber Optic Measurements

Power Meter

Features & Benefits

- Wide dynamic measurement range (up to 80dB)
- Reference power level storage(Ref Setting)
- User self-calibration function
- Comfortable LCD display and backlight LCD display supports night operation.
- Power measurements in dBm or mw and insertion loss in dB
- 10 minutes Auto-off function can be activated or deactivated.
- AA alkaline batteries can last more than 140 hours, AC adaptor also available
- Low battery indication

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Fusion Splicer

4S

6S

VIEW 5

VIEW 7

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Distribution Panel

FDF [Fiber Distribution Frame]

FDF-1U [12 / 24Core]

FDF-2U [48Core]

FDF-3U [72Core]

FDF-Wall [24 / 48 / 72Core]

[1U=44.45mm]

Parameter		Unit	FDF-1U	FDF-2U	FDF-3U	FDF-WALL
Fiber Capacity		Core	≤24	≤48	≤72	≤24 [max 72]
Number of Tray		PCS	1	2	4	2
Dimension	Height		1U	2U	3U	305 mm
	Width	mm	482	482	482	305
	Depth	mm	305	305	305	95
Remark			Rack Mount	Rack Mount	Rack Mount	Wall Mount

Applications

- Telecommunication networks
- Local Area Networks
- FTTH
- CATV networks
- Active device termination

Features & Benefits

- Low excess loss & high performance
- Retractable splicing tray
- Convenience and ease of handling
- Indoor use, outdoor use customizable

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Distribution Panel

OFD (Optical Fiber Distribution)

OFD-1 [12 / 24Core]

OFD-2 [12 / 24Core]

OFD-3 [12 / 24Core]

OFD-4 [48Core]

OFD-5 [144Core]

OFD-6 [288Core]

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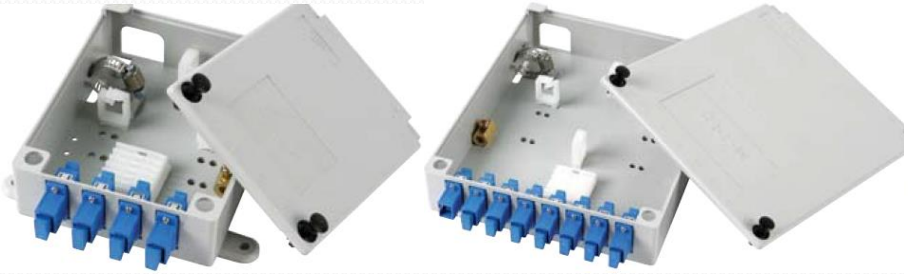
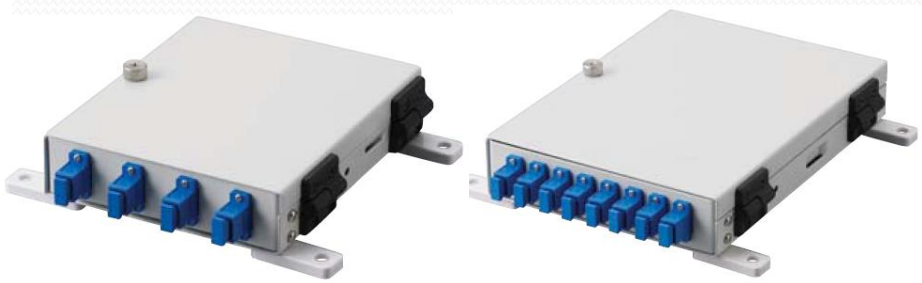
[1U=44.45mm]

Parameter		Unit	OFD-1	OFD-2	OFD-3	OFD-4	OFD-5	OFD-6
Fiber Capacity		Core	≤24	≤24	≤24	≤48	≤144	≤288
Number of Tray		PCS	1	1	1 or 2	2	5	12
Dimension	Height		1U	1U	3U	5U	5U	9U
	Width	mm	482	482	482	482	482	482
	Depth	mm	305	305	305	305	305	305
Remark			Round	Draw	Round	Panel	Panel	Panel

Mini Distribution Panel



MOFD (Plastic)



MODP (Metal)

Applications

- Telecommunication networks
- Local Area Networks
- FTTH
- CATV networks
- Active device termination

Features & Benefits

- Low excess loss & high performance
- Retractable splicing trays
- Convenience and ease of handling
- Ideal for small spaces
- Light weight

Specification

Parameter		Unit	MOFD		MODP		
Fiber Capacity		Core	4	8	4	8	12
Dimension	Height	mm	38	40	30	35	35
	Width	mm	95	145	110	140	140
	Depth	mm	120	175	135	190	190
Material			ABS	ABS	Steel	Steel	Steel

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Distribution Tap

Applications

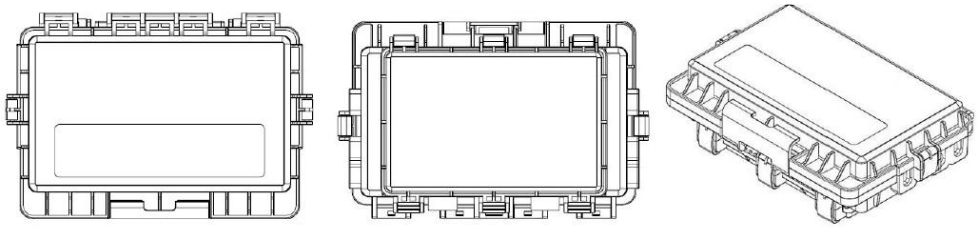
- Telecommunication networks
- Local Area Networks
- FTTH
- CATV networks
- Active device termination

Features & Benefits

- Low excess loss & high performance
- Retractable splicing trays
- Convenience and ease of handling
- Similar to the closure, but can distribute through patch cords

Specification	
Dimension (mm)	272(L) x 195(W) x 67.5(H)
In/Out Port	Feeder: 6 / Drop: 16
Tray Capacity	24C
Max No. of trays	2
Adaptor Capacity	8 (Max 16 with extension kit)
Cable (mm)	Feeder: 7~12 / Drop: 3~5

Demonstration



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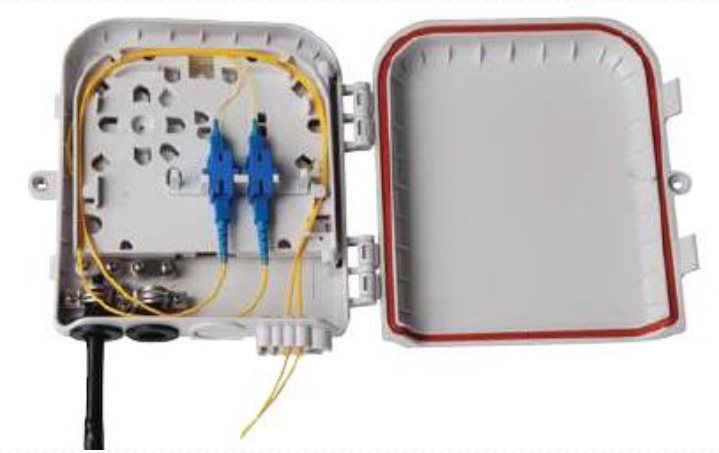
Termination Box



Applications

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Features & Benefits

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Specification

Parameter	OTP-8	OTP-16
Size[mm]	197 x 214 x 53	220 x 300 x 80
Weight [Kg]	0.8	1.3
Inlet Port	2/8	2/16
Cable[mm]	Ø 8 ~ Ø 12	Ø 8 ~ Ø 12
Splicing Capacity	8c	16c
Splitter available	1*4/1*8/2*4/2*8	1*4/1*8/2*4/2*8/2*16
Mounting type	Wall mount or Pole mount	

Inspection Micro Scope Tool Kit

Portable Inspection Scope Kit

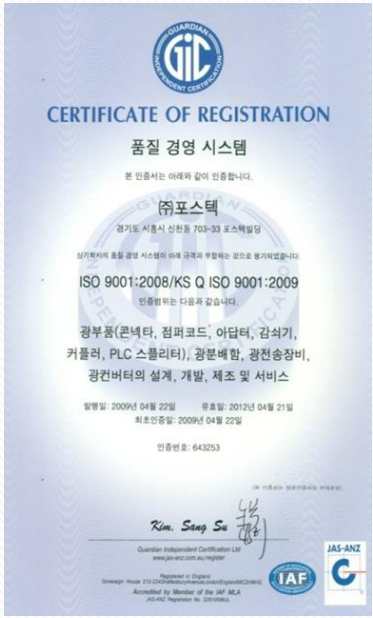
SPECIFICATION	
Length x Width x Height (cm)	29.40 x 4.32 x 17.78
Weight	0.3 lb. / 0.14 kg.
Camera Type	0.33inch CCD
Video Output	PAL/NTSC USB2.0
Light Source	Blue LED, 100,000 + hrs life
LCD Display	
Dimensions	(3.7"W) x (4.17" H) x (1.37" D)
Weight	0.92 lb. / 0.42 kg.
Video Display	3.5"TFT Active Matri x 2.2 million pixels
Power Source	Input AC, Output 110-240 V DC, 12.6V
Working Time	Continuous Working Time 〉 8 hrs
Charging Time	4 hrs

Inspection Scope

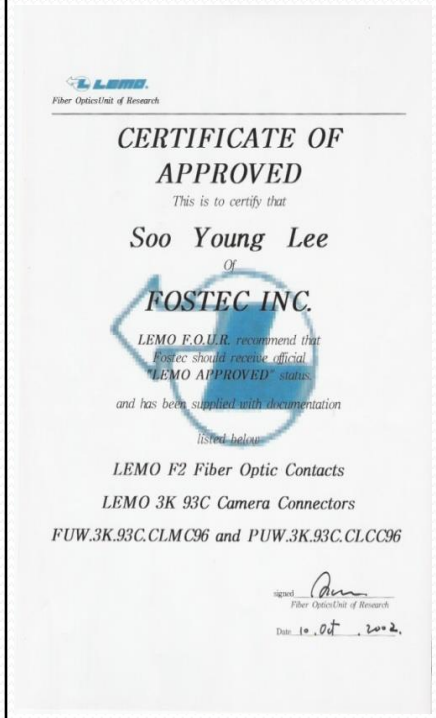
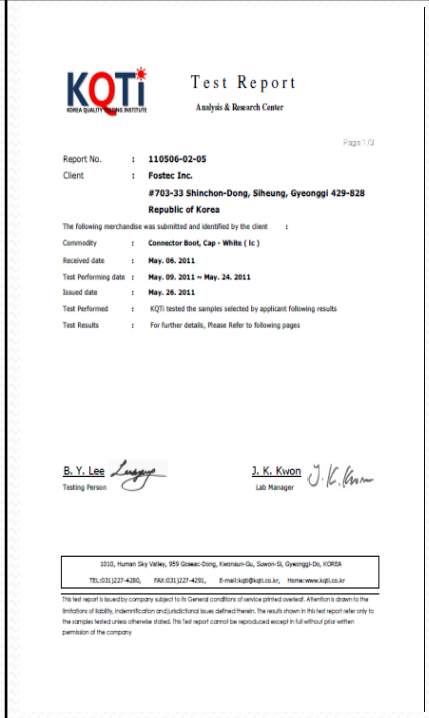
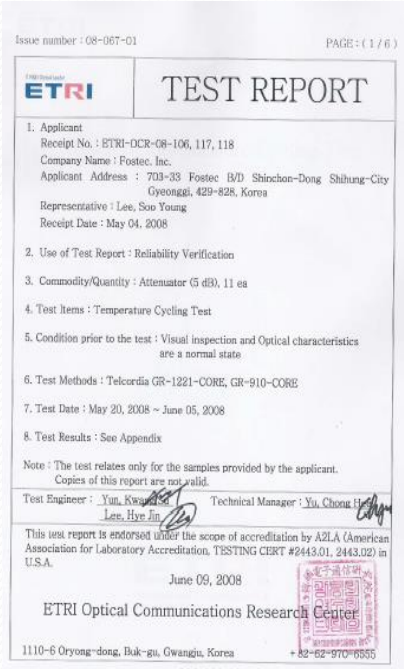
One Click Cleaner

FOSTEC

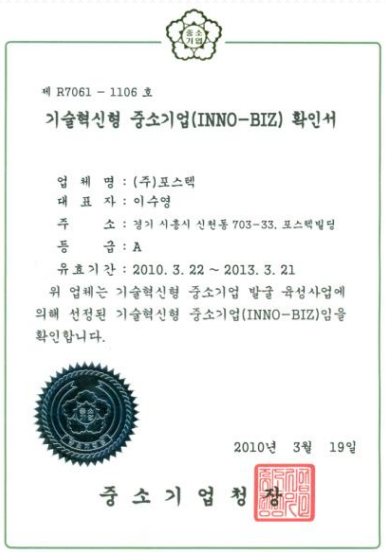
International Certificate

CE	CE	ISO 9001	ISO 14001
			

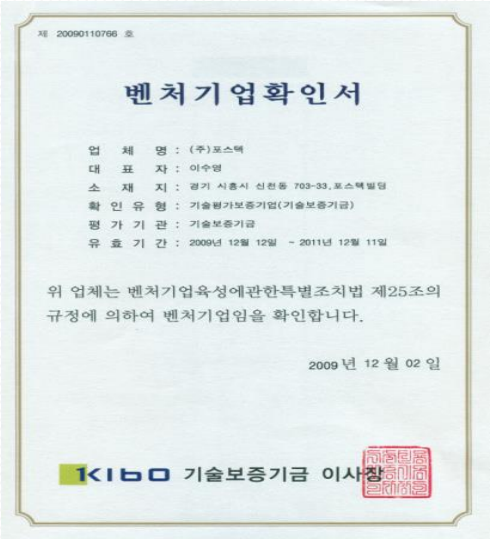
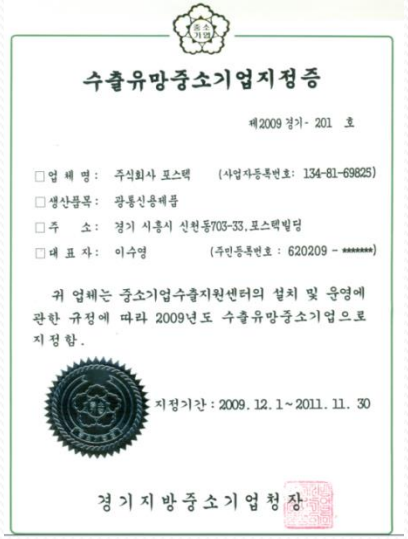
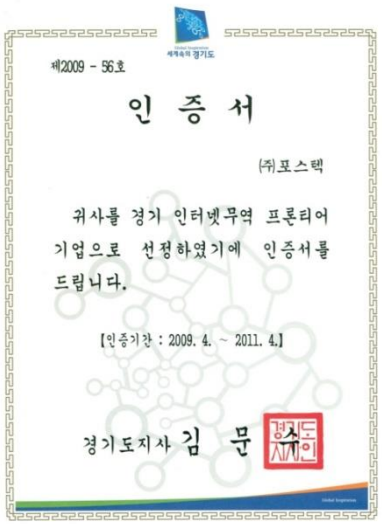
International Certificate

LEMO	RoHS	TELCORDIA
		

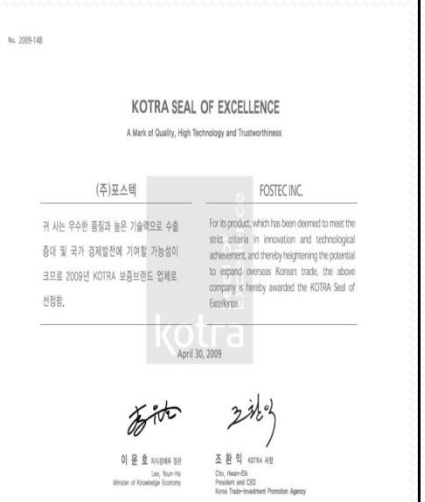
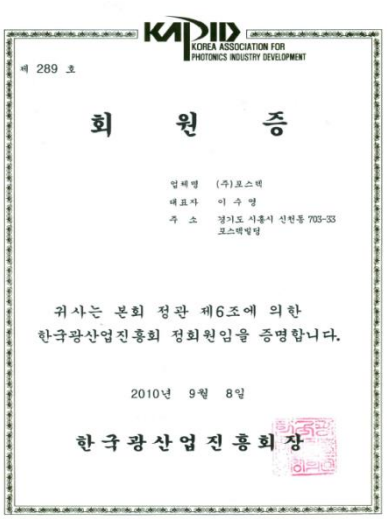
Local Certificate

MAIN BIZ	INNO BIZ	Information and Communication Equipment	R&D Center
			
Small and Medium Business Association	Small and Medium Business Association	Ministry of Information and Communication	Korea Industrial Technology Association (KOITA)

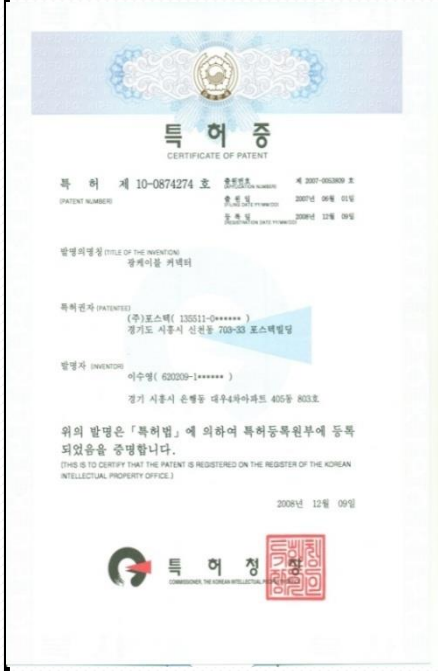
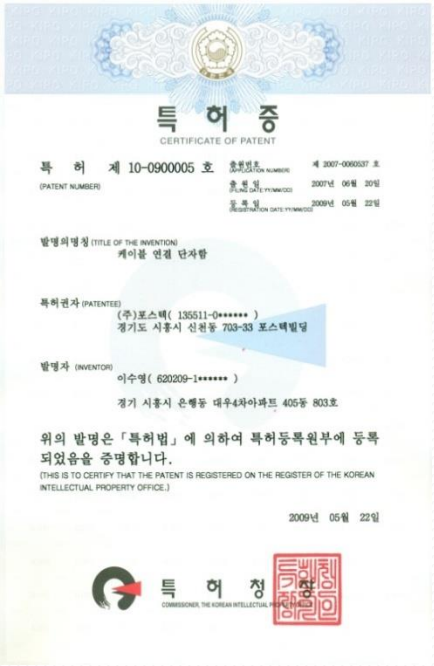
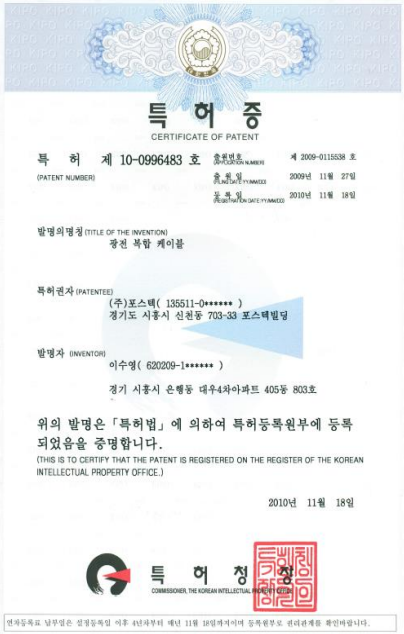
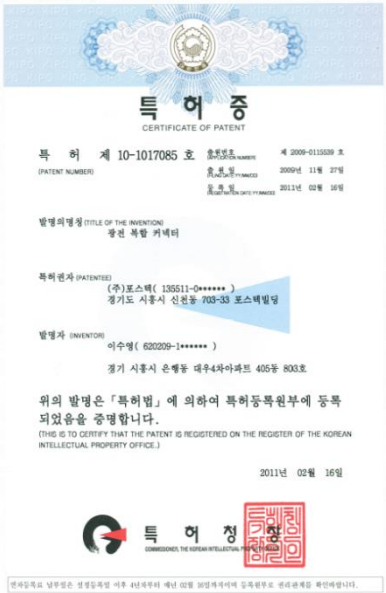
Local Certificate

Venture Company	Prospective SME	SMBA Promising Export Firm	Frontier Company
			
Korea Technology Credit Guarantee Fund	Governor of Gyeonggi Province	Small and Medium Business Association	Governor of Gyeonggi Province

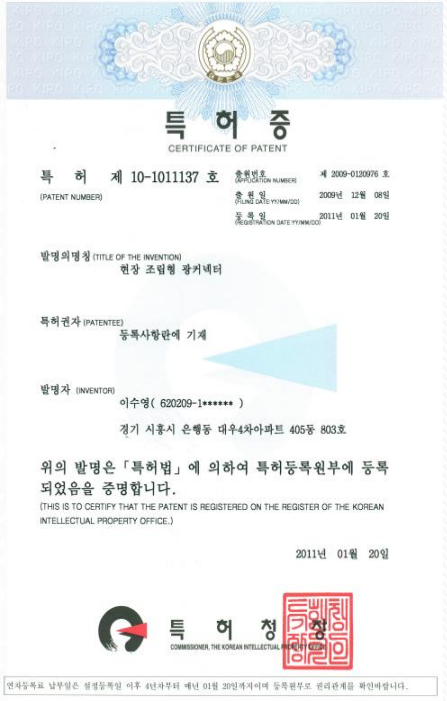
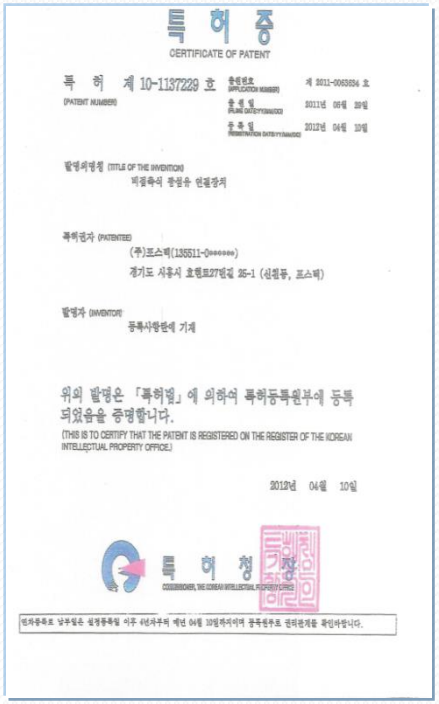
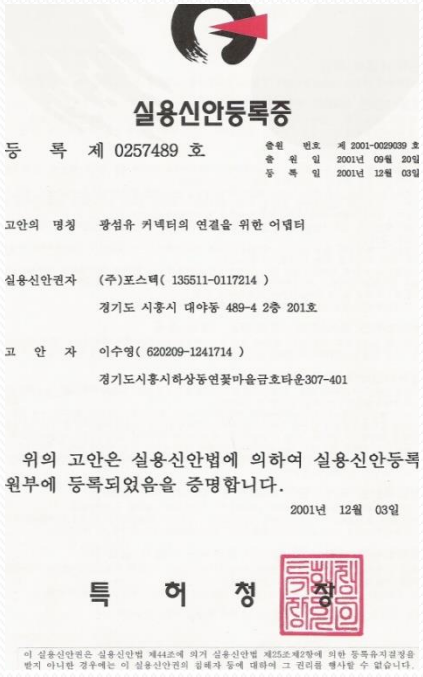
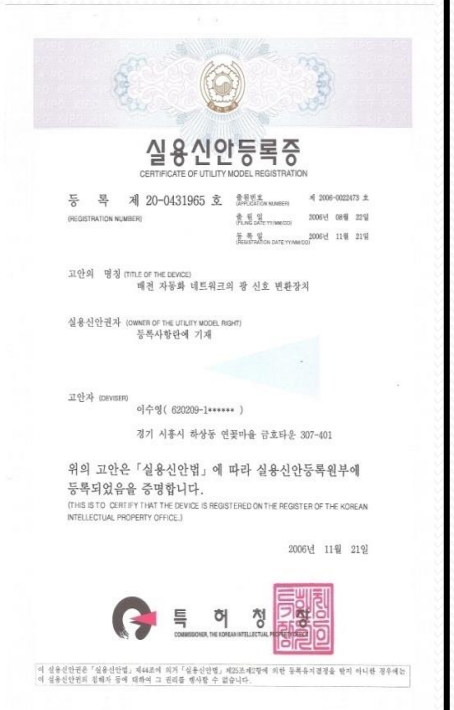
Local Certificate

Membership Certificate	KOTRA Seal of Excellence Company	KOTRA Advisory Committee Appointment	Membership Certificate
			
Korea International Trade Association	Korea Trade-Investment Promotion Agency	Korea Trade-Investment Promotion Agency	Association for Photonics Industry Development

Patents

Fiber Optic Connector	Termination Box	Hybrid Cable	Hybrid Connector
			

Patents

Fiber Optic Field Connector	Noncontact optical fiber connector	Utility Model Fiber Optic Connector	Automated Distribution optical conversion device
			

Fiber Optics Technology

Thank you.

FOSTEC