

MPO-MPO Patch Cord Specification

MPO-MPO Patch Cord

HeNan Shijia Photons Technology Co., Ltd.

Optical Fiber Cable & Connection Department

2020-07-10

1 Features

1. Features

MTP, MPO available

8/12/24/16/32F Fiber

SM, OM3/OM4/OM5 available

0.35dB low loss connector

Pulling eyes are provided as an option to protect the cable & connector during installation

Migration for 10G/40G/100G/200G/400G

TIA/IEC standards compliant

Comply with RoHS/REACH requirement

2. Application

Data Center Interconnect

High-Density Cross Connect

Backbone Installation

Telecommunication Networks

Broadband/CATV Networks

Test Labs

LAN/WAN

3. Type

8/12/24/16/32F Fiber: MTP/MPO

2 Diagram

1. Diagram

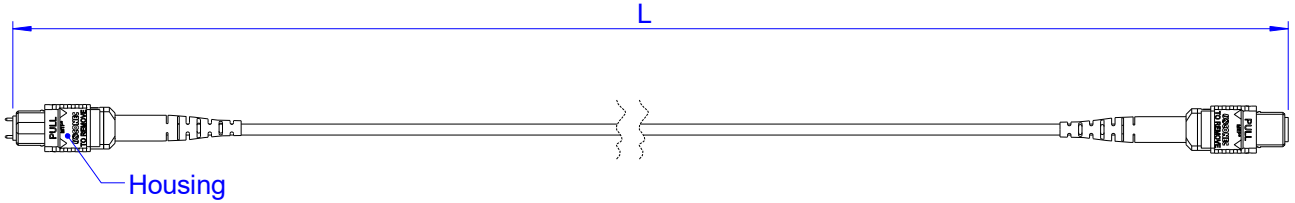


Figure 2.1 MTP-MTP Patch Cord

Notes:

1. $L \leq 1\text{m}$, tolerance = $\pm 0.05\text{m}$. $1 < L < 20\text{m}$, tolerance = $\pm 0.10\text{m}$. $L \geq 20\text{m}$, tolerance = $\pm L * 1\%$.
2. The connector type in the figure is for reference only, MTP/MPO(Male/Female) connectors are available.
3. Customized polarity is available.

2. 12F Polarity

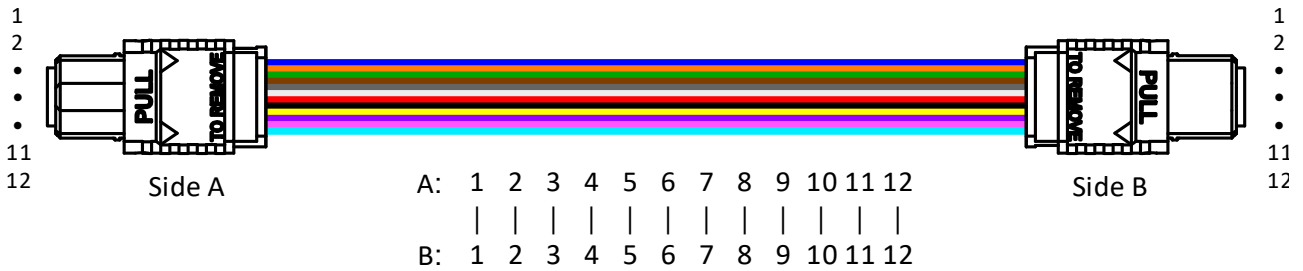


Figure 2.2 Type A: Key UP to Key Down (12F)

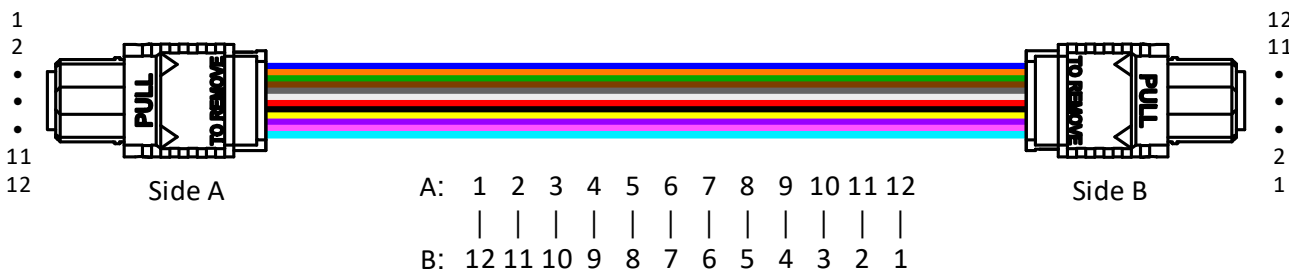


Figure 2.3 Type B: Key UP to Key Up (12F)

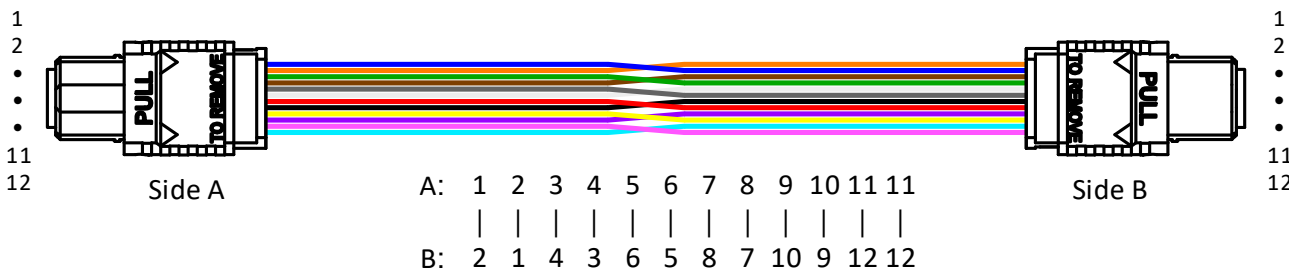


Figure 2.4 Type C: Key UP to Key Down (12F)

3. 24F Polarity

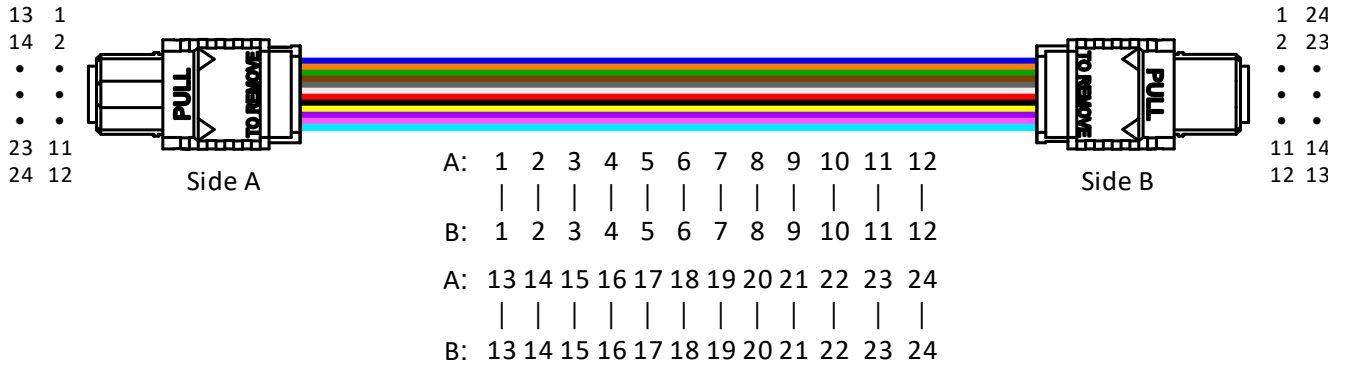


Figure 2.5 Type A: Key UP to Key Down (24F)

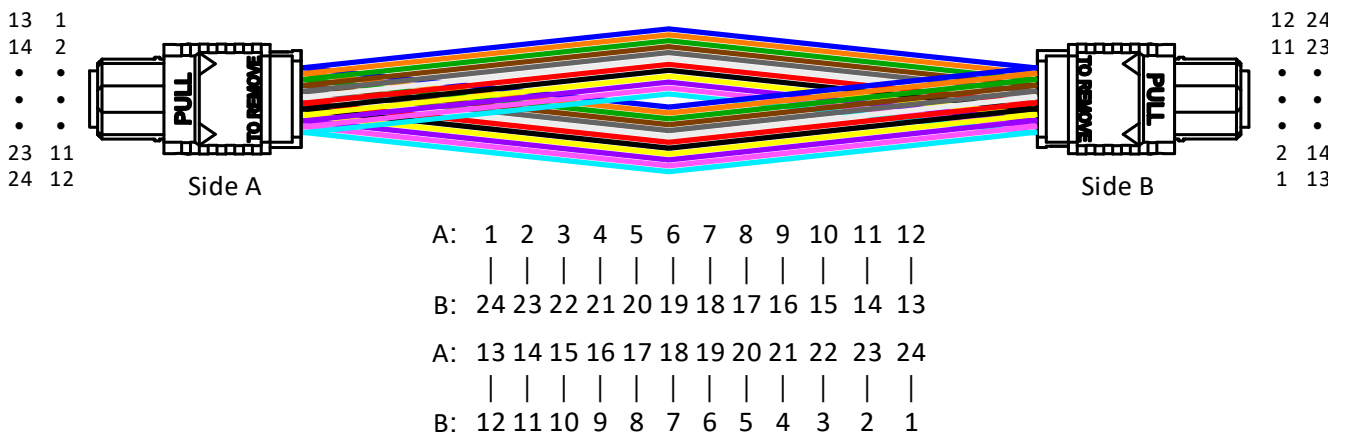


Figure 2.6 Type B: Key UP to Key Up (24F)

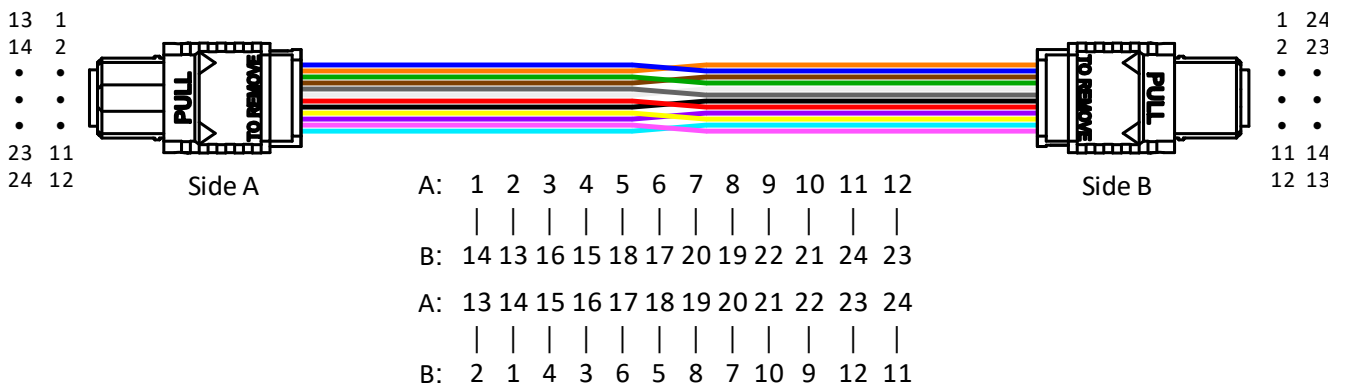


Figure 2.7 Type C: Key UP to Key Down (24F)

3 Optical Performance

Table 3.1 MPO-MPO Patch Cord Specification

Parameters	Units	Specifications	
Test Wavelength	nm	Multi-Mode	850/1300
		Single Mode	1310/1550
Fiber Type	/	G657A1/ OM3/OM4/OM5	
Cable Outside Diameter	/	Ribbon/Flat cable/Φ3.0mm etc.	
Cable Jacket	/	LSZH/OFNP/OFNR	
Jacket Color	/	G657A1	Yellow
		OM3	Aqua
		OM4	Aqua/Violet
		OM5	Lime Green
Insertion Loss	dB	Standard Loss	≤0.70
		Low Loss	≤0.35
Return Loss	dB	Multi-Mode	≥25
		Single Mode	≥50(PC) ≥60(APC)
Polarity	/	TIA-568.3 Type A, Type B, Type C	
Operating Temperature	℃	-10~+70	
Storage Temperature	℃	-40~+85	

4 Revised History

Version	Date	Description of change	Author	Approver
1.00	2020-07-10	Initial release	SH	June Liu

MPO-LC Patch Cord Specification

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3. Type

8/12/24/16/32F Fiber: MTP/MPO

2 Diagram

1. Diagram

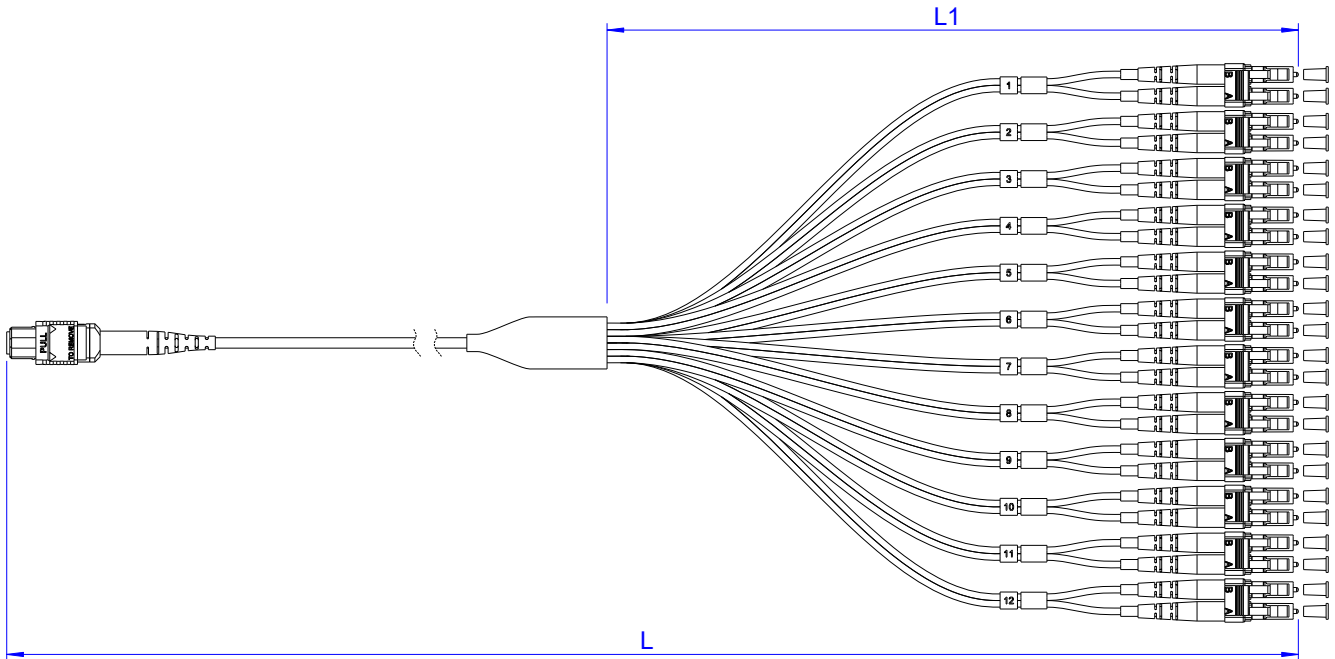


Figure 2.1 MPO-LC Patch Cord

Notes:

1. $L \leq 1\text{m}$, tolerance = $\pm 0.05\text{m}$. $1 < L < 20\text{m}$, tolerance = $\pm 0.10\text{m}$. $L \geq 20\text{m}$, tolerance = $\pm L * 1\%$.
2. The connector type in the figure is for reference only, MTP/MPO(Male/Female) connectors are available.

2. Polarity

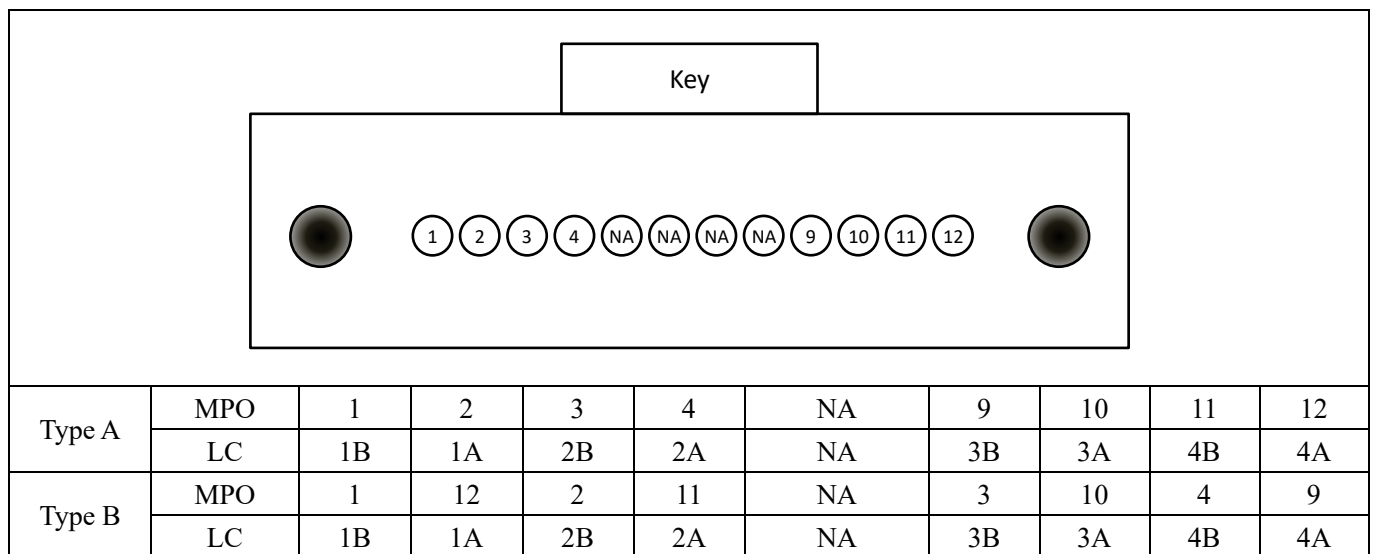


Figure 2.2 8F MPO-LC Polarity

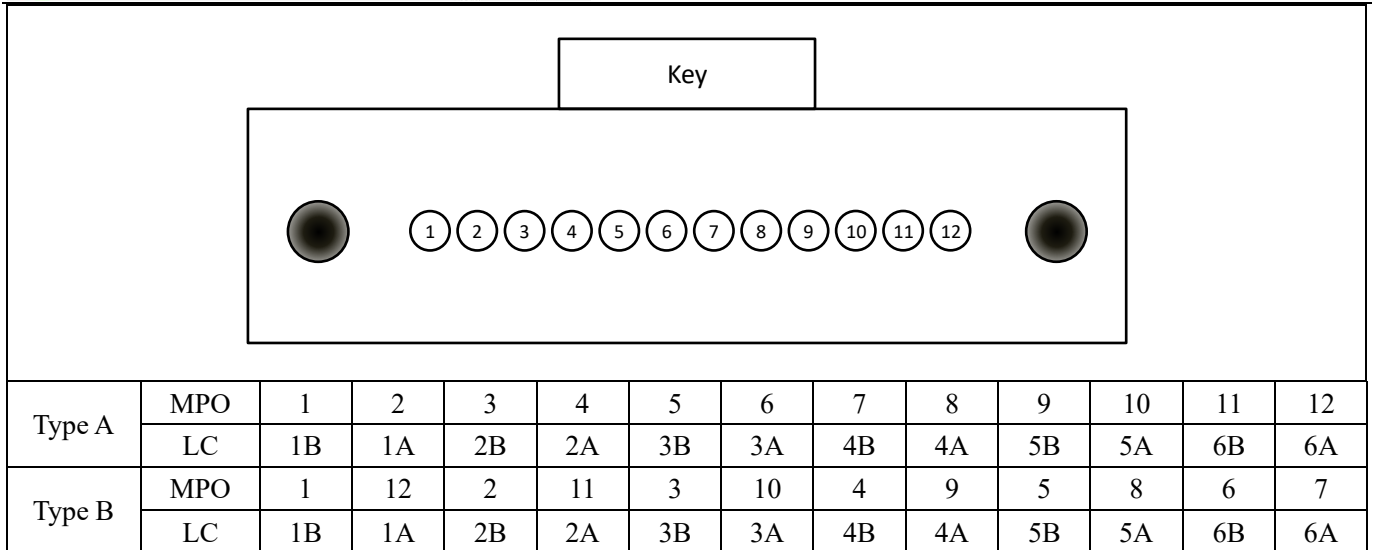


Figure 2.3 12F MPO-LC Polarity

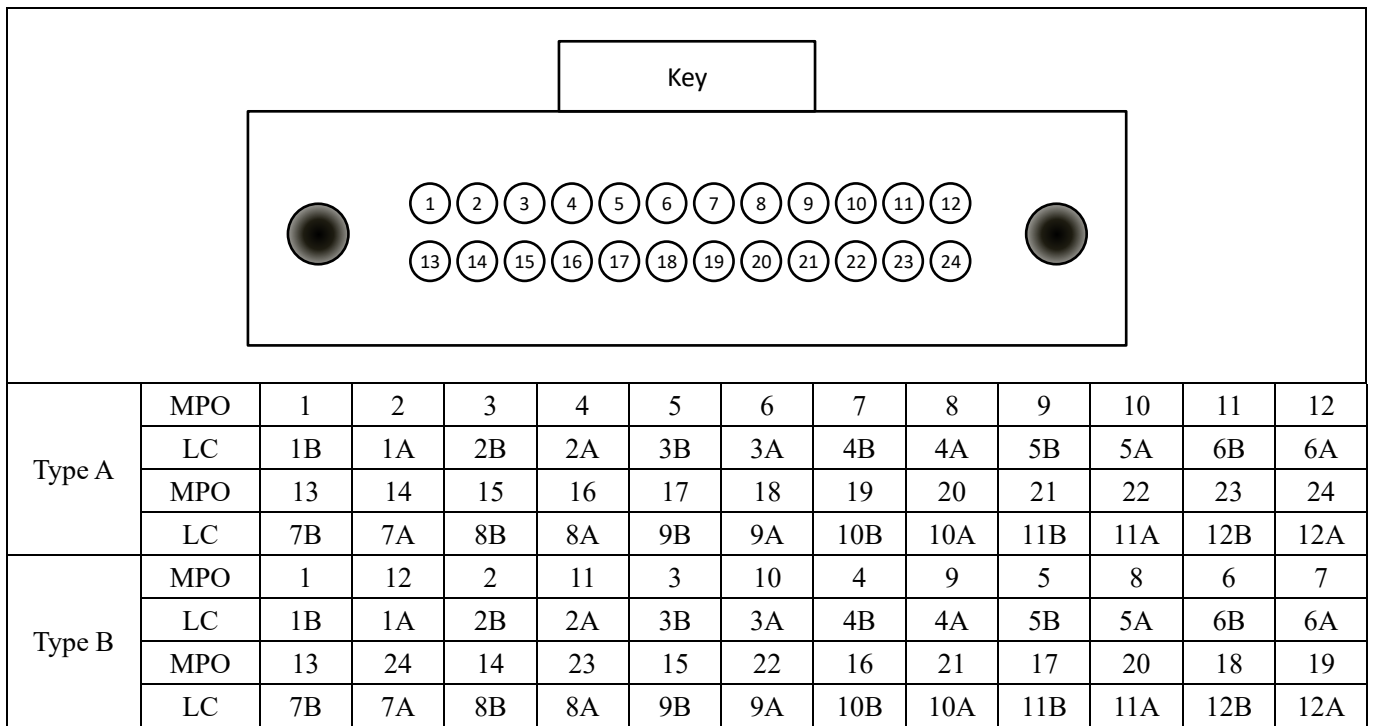


Figure 2.4 24F MPO-LC Polarity

Notes:

1. Customized polarity is available.

3 Optical Performance

Table 3.1 MPO-LC Patch Cord Specification

Parameters	Units	Specifications		
Test Wavelength	nm	Multi-Mode	850/1300	
		Single Mode	1310/1550	
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Cable Outside Diameter	/	Flat cable/Φ3.0mm		
Cable Jacket	/	LSZH/OFNP/OFNR		
Jacket Color	/	G657A1	Yellow	
		OM3	Aqua	
		OM4	Aqua/Violet	
		OM5	Lime Green	
Insertion Loss	dB	MPO	Standard Loss	≤0.70
			Low Loss	≤0.35
		LC	≤0.30	
Return Loss	dB	Multi-Mode	≥25	
		Single Mode	≥50(PC) ≥60(APC)	
Polarity	/	Type A, Type B		
Operating Temperature	°C	-10~+70		
Storage Temperature	°C	-40~+85		

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