

# JumperRun Fiber Connector Tester system



# All-in-one fully measurement





DIMENSION is fully dedicated to the field of detection technology and strives to establish itself as a global leader in optical communication detection solutions. We take great pride in unveiling our state-of-the-art detection solution, the JumperRun Fiber Connector All-in-One Tester. This cutting-edge testing device represents a new generation of fiber connector production, designed to optimize costs and enhance efficiency. By streamlining the intricate process of traditional fiber connector testing, this tester simplifies production into a single four-in-one workstation. With just one station, it effortlessly measures insertion&returning losses and End-face visual indication &interferometry simultaneously, allowing for swift and effective analysis of fiber connectors. Moreover, it offers advanced features for generating comprehensive measurement reports and storing crucial data, ensuring seamless operations.

#### **Key Features**

- All-in-one fully automated testing for IL, RL, 3D interferometry,
- and 2D End-face inspection
- Compatible with variety of connectors
- 400% efficiency increased with less working space and deployment resource
- Minimizes the needs of repeated insertions and removals while testing
- Flexibility to meet variety of demands.
- Exclusive combination with end-face cleaning solution
- Compatible with results storing and Data-base connectivity
- Integrates seamlessly with automation testing systems

#### Main Application

• Singplex fiber End-face 3D+2D visual inspection&losses measurements

#### All-in-one fully automated measurement

JumperRun empowers users with the ability to swiftly detect and automatically analyze end-face defects. Furthermore, it offers automated testing of end-face 3D interferometry as well as insertion loss and return loss. By combining these capabilities, JumperRun streamlines the testing process, making it faster, more convenient, and highly efficient.





### Compatible with variety of connectors

JumperRun is capable of supporting various types of single-core jumper testing, including A-A type and A-B type, enabling fast detection.



#### Higher efficiency with LESS space and deployment resources

The introduction of JumperRun has revolutionized traditional multi-station collaborative testing by simplifying the process. With JumperRun, a single station can effortlessly perform multiple test measurements, eliminating the need for complex setups. This streamlined approach significantly reduces the turnaround time between different stations, leading to a remarkable improvement in overall production efficiency.



#### Well protect of the connectors wear

During the usage of JumperRun, the connector can be inserted once, and with a simple click, it performs simultaneous detection of end-face defects, analysis of 3D simulation, and measurement of insertion loss. This advanced capability effectively reduces the pollution and damage caused by multiple insertions and removals, as well as the frequency of cleaning. Additionally, JumperRun conveniently stores measurement reports for easy retrieval and record-keeping purposes. With JumperRun, testing becomes a streamlined and efficient process, enhancing workflow and improving overall productivity.



#### Flexibility to meet variety of demands

JumperRun offers an efficient testing solution for high-volume scenarios by integrating software. It also can be utilized as a standalone system as well, offering the flexibility to customize and cater to the requirements of small-batch, multi-category testing.



#### All-in-one cleaning and inspection solution

When paired with the OffsoonPro cleaning machine, JumperRun creates an advanced cleaning and inspection solution. By employing a non-contact cleaning method that combines liquid and gas, it significantly boosts efficiency in both cleaning and inspection processes. This innovative approach successfully eliminates the drawbacks of contact cleaning, such as high expenses and the risk of end-face scratches.





#### Supported Data transfer and storage

The JumperRun software provide the gate for data storage, both locally and in SQL Server databases, making data management a breeze

#### Integrates seamlessly with automation testing systems

JumperRun harmoniously merges with an automation platform, culminating in a comprehensive system for the complete automation of cleaning and testing optical connectors. This advanced system encompasses a range of vital functionalities, including the detection of end-face defects, precise 3D interferometry, accurate measurement of insertion loss, and thorough evaluation of return loss. By leveraging the power of JumperRun, users can seamlessly execute a streamlined and efficient process to clean and test optical connectors, guaranteeing exceptional performance and unwavering reliability.

#### JumperRun Main Specifications

Parameter	Describe	
Detection	Endface、3D、IL、RL	
Resolution	0.29um	
Defect detection	<1um	
Test time	7s	

#### JumperRun\_IRL Main Specifications

Basic product model		IRL1112A-1FA IRL5156A-1FP		
	Fiber Type	SM 9/125	MM 50/125 or 62.5/125	
light source	Wavelength	1310/1550nm	850/1300nm	
	Source Type	Laser	Laser	
	Encircled Flux Standard	NA	IEC-61280-4-1	
	IL Stability*	±0.02dB (<0.5H) ±0.03dB (<8H)		
IL section	IL Accuracy*	0~1dB:±0.02dB 1~5dB:±0.1dB 5~45dB:±0.2dB	0~1dB:±0.02dB 1~5dB:±0.1dB 5~25dB:±0.5dB	
	IL Repeatability*	±0.02dB		
RL section	RL Range	-30~ -80dB	-15~ -60dB	
	RL Accuracy	-30 ~ -70dB : ±1.0dB -70 ~ -75dB : ±2.0dB	-15 ~ -50dB: ±1.0dB -50 ~ -55dB: ±2.0dB	
Others	Fiber length (Min)	DUT reflections (both ends)>50dB : 0.6m DUT reflections (both ends)<50dB : 1.5m		
	Testing Time (s)	Fast mode: 0.85;Normal mode: 1.4S		
	Display resolution	0.01dB		
	Input power	AC90~ 260V/50HZ		
Mainframe	Warming up time	30 minutes (if the storage temperature is different from the service temperature, the preheating time is 90 minutes)		
	Recalibration period	2years		
	Working temperature	10°C ~ 40°C		
	Storage temperature	-40°C ~ 70°C		
	Size	ALPHA platform: 359mm×274mm×115mm,OMEGA platform;462mmX374mmX171mm, Module: 285mmX133mmX71mm		

JumperRun



#### **FUTURE+Main Specifications**

Ltem	Range	Repeatability	Reproducibility
ROC(mm)	3~Flat	±0.3%	±0.5%
Apex Offset(um)	0~250	±0.5	±1.5
Fiber Height (nm)	-1000~1000	±1	±2
APC Angle ( ° )	0~12	±0.01	± 0.015
Measure Speed (Do not contain focus)		Endface	1s
		Interferometry	1.5s
		Both	2s
Endface Resolution		0.29um	
Data Link		USB3.0	
Power Supply		DC24V	
Size(HXWXD)		283mmX150mmX108mm	

\* Sigma Values

## Ordering Information



Eg: IRL1112A-1FA Mandrel-free IRL test module,1310/1550,SM 9/125,InGaAs 2mm, Laser output 1CH FC/APC

Note: RL implementation method A model supports dual laser wavelengths, with two digit codes representing two laser wavelengths. Customers can choose the laser wavelength from the list or customize the laser wavelength.





BINNA2



EASYCHECK



Offsoon Pro

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