

Universal Optical Test Platform



Automation testing for optical manufacturing can effectively improve the production efficiency and reduce production costs, the multi-application programmable universal optical test platform, is the ideal solution for optical manufacturing automation testing system.

Dimension Universal Optical Test Platform, provides a whole set of multi-application optical test solutions for laboratories and high standard manufacturing enterprises. It provides dual-slot ALPHA test platform and 11-slot OMEGA test platform 2 forms, innovatively adopts the architecture of core board + backplane + functional test module slot, the core board communicates the functional test module via standard USB protocol. The platform can seamlessly compatible with various optical test modules, to realize one-stop automated testing of multiple performances for optical devices.

Main Features

- Separate design of hardware architecture

The platform adopts the architecture of core board + backplane + functional test module, core board communicates the functional test module via standard USB protocol.

- Platform + module design, multi-application and scalable
- Platform + module design, compatible with optical switch, optical attenuation, light source, optical power meter, BER tester, IL/RL tester, polarity detection and other optical performance test modules, flexible configuration, easy to expand.

- Hot Plug-pull

The chassis provide built-in slot identification, power-on control etc., support hot plug-pull of various test modules.

- Multiple control methods

The functional modules and chassis use standard USB 2.0 communication protocol, speed can up to 480MB/s. The module control board provides various control interfaces such as USB, SPI, and serial port etc, users can easily integrate their own developed function modules into the control system.

- Control and automation

The platform supports Ethernet and USB control functions, can builds automated test systems together with other instruments.

- Configuration and performance

The OMEGA test platform's motherboard adopts Intel's sixth-generation Skylake-U, the onboard Core i5 CPU (standard) has excellent performance. The ALPHA test platform adopts ARM + linux architecture, with flexible and convenient display screen for button and touch control.

- Rich slots

OMEGA provides 11 slots and up to 10 function module positions, ALPHA provides 2 slots and 2 function module positions.

- Industrial design

The OMEGA platform is designed in a standard 19-inch 3U chassis, it can be used as rack-mount or desktop testing device to meet customer's different environments.

- Power supply

The module supports 24V/2A power supply, can provide 48W power supply for function modules.

Main applications

- Laboratory performance testing
- Optical component manufacturing testing system
- Optical telecom equipment automatic testing system
- Manufacturing and industrial robot control system

◀ OMEGA optical test platform

OMEGA is a scalable and programmable 11-slot universal optical test platform, its motherboard applies Intel Skylake-U architecture, the onboard I5-6300U 2.4GHz (standard) / I7-6600U 2.6GHz (customize) supports dual channel DDR4 and SO-DIMM memory slot, memory capacity up to 32GB, support multiple displays like VGA, HDMI etc, and support dual channel independent display.



The OMEGA test platform's airborne Windows 10 operating system, apart from the built-in softwares that comes with Windows and the applications that developed by Dimension, users can also install any supported third-party applications. Various USB devices supported too.

1. Fast start, powerful processing capability, support multitasking
2. Compatible OFFICE software, convenient and fast
3. Accessible to printer, camera, mouse, keyboard, Bluetooth-WIFI module, AUTOGET end face microscope and other equipments

Windows 10 System Installed in Omega



Support Multiple Tasks



◀ ALPHA optical test platform

ALPHA is a compact and programmable dual-slot universal optical test platform. It adopts ARM + linux architecture, with 3.2" touchscreen and GUI, supports buttons control and touch control, can quickly and accurately starts measurement without PC or any other controlling devices, which is quite flexible and convenient. The ALPHA chassis has a built-in gravity sensor that supports horizontal or vertical placement, it is ideal for laboratory or automated production testing environment.



Horizontal Display



Vertical Display

◀ Specifications

Parameter	OMEGA	ALPHA
Processor	I5-6300U 2.4GHz (Standard) 、 I7-6600U 2.6GHz (Custom)	
Chipset	Skylake-U	
Ram	Dual channel DDR4 1866/2133MHz SO-DIMM, UP to 32GB (non-ECC)	
Hard Disk	M.2*1, SATA2*1, built in 256G SSD	
Protocol	USB2.0	
Module NO.	11-slots, 10functional modules	2-slots, 2 functional modules
Serial Port	RS232*1	
Network Card	10M/100M/1000M Ethernet	10M/100M Ethernet
USB	USB3.0*3, USB2.0*1	USB2.0*2
Display Joint	HDMI*1, VGA*1	NA
Trigger Port	Yes	
Power Supply(module)	24V/2A	
Support Modules	Stable light source / optical power meter / optical switch / programmable optical attenuator / polarity tester/ BERT etc.	
Input Voltage	AC 90~260V 50Hz	
Working Temperature	10°C~40°C	
Storage Temperature	-40°C~80°C	
Size	462mm*374mm*171mm	359mm*274mm*115mm

◀ Relate products



Stable light source



Programmable optical switch



Optical power meter



POA Programmable Optical Attenuator

Dimension Technology Co.,Ltd

Tel: +86 755-26480850

Email: sales@weidujs.com

Web: www.dimension-tech.com



Optical testing solution

