

## 1.1 Outline of Equipment

This equipment is an optical spectrum analyzer that permits measuring the spectrums of light sources such as LD and LED and also the loss wavelength characteristics and transmission characteristics of optical fiber cables, optical filters, etc.

The measurable wavelength range is as wide as 600 to 1750 nm.

This permits optical spectrum analysis of the near infra-red ray area.

The equipment is provided with not only the basic performance of high resolution, high-sensitivity, high-accuracy, wide dynamic range and excellent linearity but also many functions such as three-dimensional display, various data processing function and program measuring function.

As data output functions, the equipment is capable of hard-copying screens through a built-in high-speed printer, and reading/writing waveforms and programs through a built-in floppy disk.

Besides, the equipment is equipped with GP-IB as the standard configuration, thereby exerting full remote control.

### 1.1 仪器概况

该仪器系光谱分析仪，可用来测量LD及LED等光源的频谱，也可用来测量光缆、滤光器等的损耗波长特征及传输特征。

可测量的波长范围为600到1750纳米。

该仪器可进行近红外线区的光谱分析。

该仪器不仅具有高分辨率、高灵敏度、高精度、宽动态范围以及精确的线性等基本性能，而且还拥有许多其它功能，如三维显示、各种数据加工功能及程序测量功能。

在数据输出方面，该仪器能够通过内置的高速打印机将屏幕内容做成硬拷贝，并通过内置软盘读/写波形及程序。

另外，该仪器还装有标准配置GP-IB以进行充分的远程控制。

## 1.2 Specifications

Table 1-1 shows the specifications of this equipment.

### 1.2 规范

表1-1显示该仪器的规范。

## 1.3 Options

Table 1-2 shows the options of this equipment.

## 1.3 选项

表1-2显示该仪器的选项。

## 1.4 Configuration

In the standard configuration, this equipment consists of the accessories shown in the Table 1-3 Standard Accessory List.

## 1.4 配置

标准配置的该仪器包括下列附件，如表1-3“标准附件表”所示。

## 1.5 Precautions on Handling

### 1.5.1 Operating temperature range

The operating temperature range guaranteed for this equipment is +5 to +40°C.

But the operating temperature range in a part of function is +15 to +30°C.

## 1.5 操作中的注意事项

### 1.5.1 运行的温度范围

该仪器的安全运行温度范围为+5到+40°C。

但在执行某部分功能时的运行温度范围为+15到+30°C。

### 1.5.2 Environmental conditions

This equipment incorporating a very-high-precision monochromator requires extreme care about temperatures, shocks and vibrations when it is stored and transported.

In particular, when the equipment is operated over the following environmental conditions, its performance may not be restored.

### 1.5.2 环境条件

该仪器装有高精度度的单色仪，因此在储存及运输时，要求对温度、冲击及振动格外小心。

尤其是当该仪器超出下列环境条件下运行时，其性能可能无法恢复。

### **Environmental Conditions**

- (1) Storage temperature range : - 10 to +50°C
  
- (2) Vibration
  - Oscillation frequency : 10 Hz
  - Compound amplitude :  $2 \pm 0.5$  mm
  - Direction of vibration : Up/down, left/right, forward/backward
  - Vibration time : 10 minutes each (in each direction of vibration)
  
- (3) Shock

Shock equivalent to a natural drop when one side of the base is raised 2.5 cm in the static state on the hard wooden floor.
  
- (4) Installation

When this equipment is installed in the vertical or reverse direction for a long time, the accuracy of its built-in monochrometer will be affected adversely.

During transportation and storage, this equipment must be kept level.

### **环境条件**

- (1) 存储温度范围 : -10到+50°C
  
- (2) 振动
  - 振动频率 : 10赫兹
  - 复合振幅 :  $2\pm 0.5$ 毫米
  - 振动方向 : 上/下, 左/右, 前/后
  - 振动时间 : 每次10分钟(每个振动方向)
  
- (3) 冲击

冲击是指当该仪器底部的一侧从硬木地板上抬起2.5厘米处于静止状态时所受到的自然下降力。
  
- (4) 安装

该仪器长时间纵向或反向安装时，其内置单色仪的精确度将受到不利影响。

在运输及存储过程中，该仪器必须水平放置。