## PSS DOA SERIES

 DBEtal optical attenuator $\ggg$
## ｜ Product Introduction

The PSS digital optical attenuator series has single－mode（1270nm～1610nm）and multi－mode （850nm）multi－version applications such as single，four，and eight channels，and has the characteristics of low insertion loss，high attenuation accuracy and repeatability；simultaneously optical input and output end is integrated with a high－precision optical power meter，can detect the input and output optical power in real time；Various kind of communication interfaces，support RS232，LAN or GPIB interface．The equipment can be used for the application testing of various rate optical modules，as well as various integrated tests in the fields of optical communication and CATV，to satisfy the different application needs of the customers．

## ｜Product application

－Optical Modules Test
－ROSA／BOSA Optical device Test
－System and device optical loss simulation
－Laboratory and Scientific Research
－Product features
－Low insertion loss，$\leqslant 1.5 \mathrm{~dB}$（1310nm／850nm）
－Attenuation range $0 \sim 40 \mathrm{~dB}$（or customized range）
－High attenuation accuracy，$\pm 0.05 \mathrm{~dB}$（single mode），$\pm 0.2 \mathrm{~dB}$（multi－mode）
－High repeatability of attenuation，$\pm 0.05 \mathrm{~dB}$（single mode），$\pm 0.1 \mathrm{~dB}$（multi－mode）
－Wide detection range of the input and output optical power meter，with good linearity
－High precision of fixed power output
－Support LOS signal hysteresis test，including the power point and level size of LOS alarm and de－alarm，as well as hysteresis interval，the test is completed by the lower computer，typical test time $<1$ s


Internal optical path diagram of multi－channel single－mode optical attenuation with power monitoring


Internal optical path diagram of multi－channel，multi－mode optical attenuation with power monitoring
－Technical parameters

| Parameters | Description／Value |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Wavelength range | $1270 \mathrm{~nm} \sim 1610 \mathrm{~nm}$ |  | $850 \mathrm{~nm} \pm 20 \mathrm{~nm}$ |  |
| Calibrate the wavelength | $1270 \mathrm{~nm}, ~ 1290 \mathrm{~nm}, ~ 1310 \mathrm{~nm}, ~ 1330 \mathrm{~nm}, ~ 1490 \mathrm{~nm}$ ， <br> 1550 nm，Other wavelengths can be custom calibrated |  | 850nm |  |
| Product model | PSS DOA／DOA24041／DOA14081 |  | PSS DOA－M1／DOA13042／DOA13082 |  |
| Number of channels | 1 | 4／8 | 1 | 4／8 |
| Insertion Loss | $\leqslant 2 \mathrm{~dB}$ | $\leqslant 1.5 \mathrm{~dB}$ | $\leqslant 2 \mathrm{~dB}$ | $\leqslant 1.5 \mathrm{~dB}$ |
| Attenuation Range | 0－60dB | 0－40dB | 0－60dB | 0－30dB |
| Attenuation accuracy | $\begin{aligned} & \leqslant \pm 0.2 \mathrm{~dB}(0 \sim 40 \mathrm{~dB}) \\ & \leqslant \pm 0.3 \mathrm{~dB}(40 \sim 60 \mathrm{~dB}) \end{aligned}$ | $\pm 0.05 \mathrm{~dB}$ |  |  |
| Attenuation repeatability | 0.1 dB | $\pm 0.05 \mathrm{~dB}$ |  | $\pm 0.1 \mathrm{~dB}$ |
| Input light detection range | － | ＋20～－30dBm | － | － |
| Output light detection range | － | ＋20～－50dBm | － | ＋10～－40dBm |
| Optical power meter linearity | － | $\pm 0.05 \mathrm{~dB}$ | － | $\pm 0.05 \mathrm{~dB}$ |
| Attenuation response time | $\leqslant 20 \mathrm{~ms}$ | $\leqslant 50 \mathrm{~ms}$ |  |  |
| Optical connectors | FC／UPC（FC／APC Customizable） |  |  |  |
| Optical shutter | － | Option implementation | － | Option <br> implementation |
| LOS hysteresis | － | Option implementation |  |  |
| Button LCD | Support |  |  |  |
| Power supply | AC100V～240V，50HZ |  |  |  |
| Size（ $\mathrm{L} * W * H$ ） | $200 \times 183 \times 97 \mathrm{~mm}$ | $366 \times 306 \times 112 \mathrm{~mm}$ | $200 \times 183 \times 97 \mathrm{~mm}$ | $366 \times 306 \times 112 \mathrm{~mm}$ |

