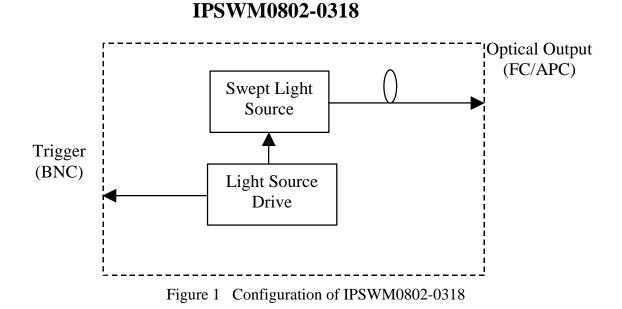
## **Swept Light Source**

Part Number: IPSWM0802-0318 Date: October 11, 2013

### 1. Configuration



### 2. General Condition

| Item                  | Min. | Typical | Max  | Unit |
|-----------------------|------|---------|------|------|
| Power supply          | 100  | -       | 240  | VAC  |
| Power consumption     | -    | 30.0    | 50.0 | W    |
| Operating Temperature | 15   | 25      | 50   | °C   |
| Operating Humidity    | 30   | 60      | 90   | %    |
| Storage Temperature   | -20  | -       | +65  | °C   |
| Humidity              | 10   | -       | ~95  | %    |

#### 3. Optical characteristics

| Items                        | Specifications      |        | Unit | Notes |                          |  |
|------------------------------|---------------------|--------|------|-------|--------------------------|--|
| Items                        | Min.                | Typ.   | Max. | Unit  | notes                    |  |
| Center Wavelength (nm)       | 840                 | 850    | 860  | nm    | @25°C and CW. Connectors |  |
| Wavelength Scan Range        | -                   | 50     | -    | nm    | are included.            |  |
| @-10dB cut off               |                     |        |      |       |                          |  |
| Average Optical Output Power | -                   | 5.0    | -    | mW    |                          |  |
| Scan Frequency               |                     | 10~500 |      | Hz    |                          |  |
| Wavelength Repetition Rate   | 20~1000             |        |      | Hz    |                          |  |
| (Forward + backward)         |                     |        |      |       |                          |  |
| Coherence Length*            | -                   | 5      | -    | mm    |                          |  |
| Fiber Type                   | HI780 or equivalent |        |      |       |                          |  |
| Optical Output type          | FC adaptor          |        |      |       |                          |  |
| Connector Type               | FC/APC              |        |      |       |                          |  |

\* Coherence length is defined as the path length mismatch at a single sided displacement (from match to mismatch point only) in Mach-Zehnder interferometer that results in the fringe visibility being reduced by 6dB.

#### **3.** Electrical characteristics

| Item   | Specifications  |      |      | Unit | Notos                  |
|--|-----------------|------|------|------|------------------------|
| Item   | Min.            | Тур. | Max. | Unit | Notes                  |
| Scan Waveform                                | Linear trigonal |      |      | -    | See Figure 2 in detail |
| Scan Trigger (FSYNC)                         | 10~500          |      |      | Hz   |                        |
| V <sub>OH</sub> of TTL input/output          | 3.80            | -    | -    | V    | For scan trigger.      |
| V <sub>OL</sub> of TTL input/output          | -               | -    | 1.02 | V    |                        |
| Electrical Trigger Signals<br>Connector Type | BNC connector   |      |      | -    |                        |

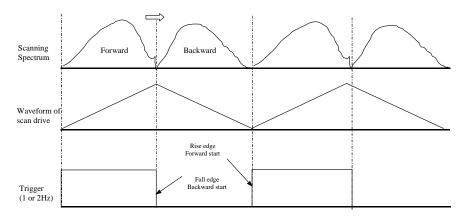
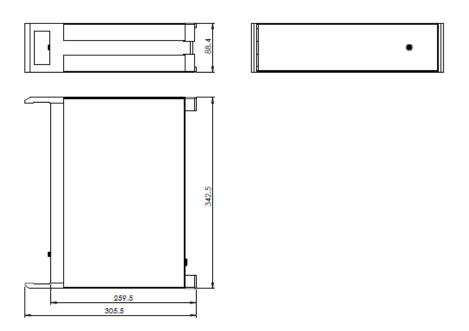


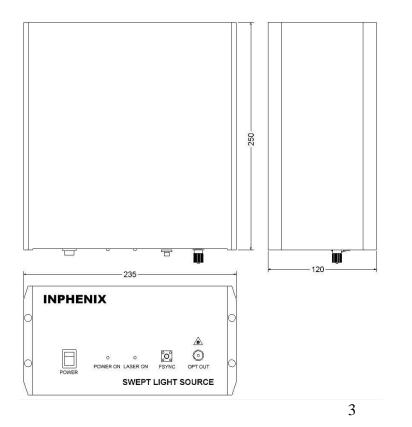
Figure 2 Timing and waveform of scan drive of IPSWM0802-0318

### 4. Mechanical Specifications

Mechanical Drawing of 340mm (W) x 260mm (D) x 90mm (H) Case Type

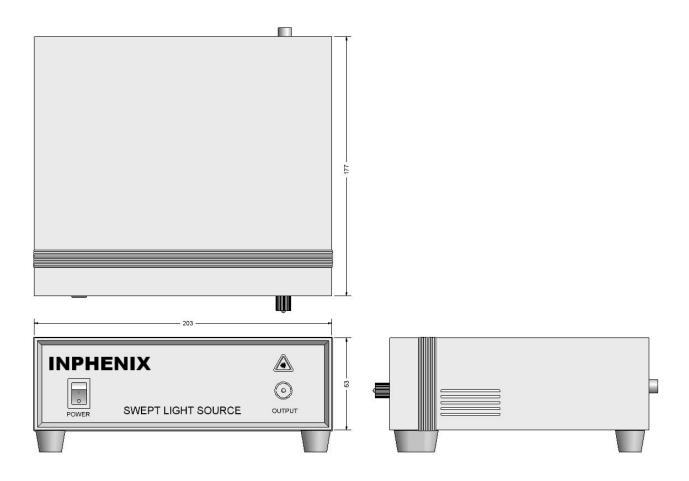


Mechanical Drawing of 235mm (W) x 250mm (D) x 120mm (H) Case Type





Mechanical Drawing of 205mm(W)×60mm(H)×175mm(D) Case Type



### 5. Part Numbering Structure of Swept Light Source desktop

| Model Number   08**: 800~890nm window   10**: 1010~1090nm window   13**: 1300~1390nm window   15**: 1500~1590nm window |  |
|--|--|
| Output Type<br>0-FC Adaptor<br>1-Pigtail fiber   |  |
| Connector Type<br>0-No Connectors<br>3-FC/APC 4-FC/UPC<br>7-SC/APC 8-SC/UPC  |  |
| <b>Fiber Type</b><br>1-900 μm SM Fiber<br>2-900 μm PM Fiber  |  |
| Case Size<br>6- 235×250×120mm case<br>7- 205×175×60mm case   |  |

8- 340×260×90mm case

9-450×300×90mm case

**Example**: IPSWD0802-0316: 850nm-type Swept Light Source desktop in 235×250×120mm case with FC adaptor output, 900um SM fiber with FC/APC connector.