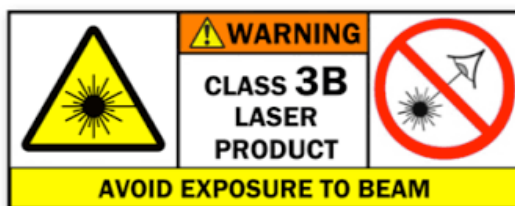


## Bench-top Full C-Band SM ASE Light Source

# User Manual

### P/N: ASES-xxC122xxx

Version: 2025-9



## Warning

When Emission Button is turned on the output of this light source will be on at the power level previously set at factory, which is 10dBm. This power level can be changed through provided GUI.

## 1 Warning

- 1) Only single mode fiber (SMF, 9/125 $\mu$ m) cable is compatible to this ASE. Using of other fiber cables, including multimode fiber cables and single-mode fiber cables with different core size, may cause poor performance or even damage to the ASE.
- 2) Only connectors as indicated on the front panel are allowed, such as FC/APC, SC/APC, etc.
- 3) Clean and inspect connectors and fiber ends prior to installation.
- 4) Use only industry approved methods, materials, and solutions for cleaning.
- 5) Always turn off the ASE prior to plugging/unplugging fiber cable. Failure to do so may cause permanent damage to the ASE.

## 2 Summary

This ASE works in C-band. Its front panel is shown in Figure 1.



*Figure 1: Front panel of ASE*

- The module needs 100-240V AC power. Its on-off power switch locates on rear panel.  
Note: the RS-232 port on the rear panel is not functional for this model.
- The fiber connectors on its front panel are for laser input and output. SMF-28 optical fiber cables are required for this model.
- The micro-USB port is for remote control.
- The Emission Button is for ON/OFF of whole unit.

Note:

- a. When it is OFF USB functions are disabled.

b. The ASE is designed to work between -10 ~ 60°C temperature range. Humidity should not exceed 90%. Installation is recommended in a temperature & humidity controlled, dust-free environment.

### 3 Connection and Operation

#### Warning

- **This ASE will have 10dBm output once the ‘Emission’ button lights up, even without GUI connection.**
- **An initial 10Bm output was set in factory and can be changed and saved by using GUI.**
- **Let the ASE warm up for up to 30 seconds to get stable output after powering it on or changing output power level significantly in GUI.**

- 1) Plug the AC power cord into the receptacle on the rear panel of the module, and connect to 100-240V AC power source.
- 2) Clean the connector of SMF-28 fiber cables properly, and then connect it to the output port.
- 3) Turn power on using the rocker switch on the rear panel of the device.
- 4) Push the Emission button down to turn on the whole device. The Emission Button will be lighted up in blue. Now the device will have 10dBm output power.
- 5) Connect the micro-USB port on the front panel to a computer by using the USB cable coming with the device.
- 6) Remote software control (GUI) provided can be used for getting ASE status, changing output power, saving setting, etc. Please see Part 4 for detailed instruction.
- 7) Pushing the Emission button to turn off the ASE.

### 4 Software Instruction

Note:

USB to COM driver for FTDI devices needs to be installed on the computer for remote control. The driver can be downloaded from <https://ftdichip.com/drivers/vcp-drivers/>.

- 1) Install the ASE GUI on host computer from the flash drive coming with the ASE.
- 2) Turn on Emission on the front panel of the ASE to power up the whole unit and enable USB functions.
- 3) Run ASE GUI.
- 4) ASE type selection

Choose **ASE-L** in Device Model.

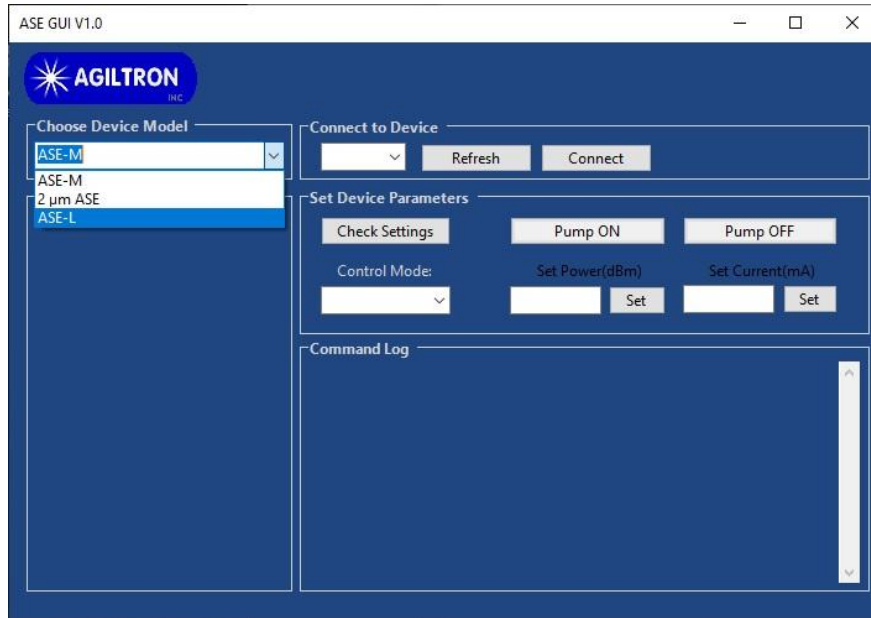


Figure 2: Remote control software: Device Model selection.

5) Port Selection:

Select the serial port, to which the ASE is connected, from the 'Port List', and click 'Connect'. If the desired port doesn't show up click 'Refresh' button and try again.

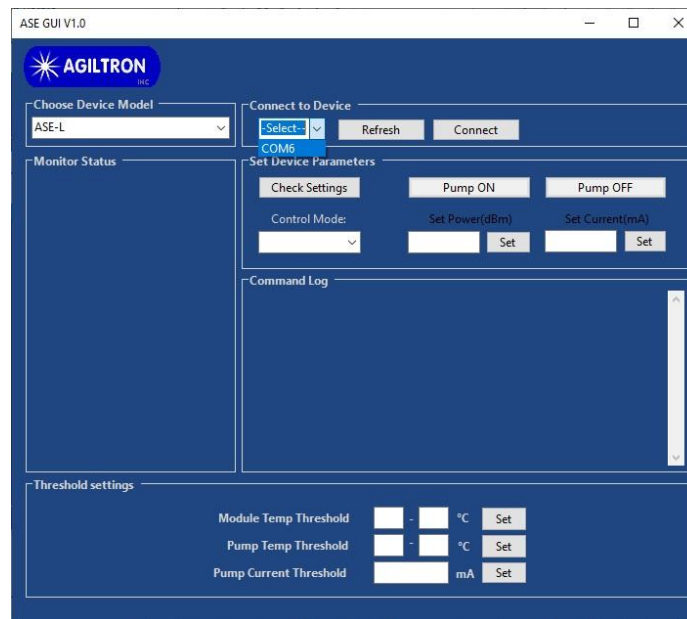


Figure 3: Remote control software: COM port selection.

- 6) Click 'Connect' button to build the connection between computer and the ASE.
- 7) Once the ASE has been connected successfully the status of the ASE will be displayed in Monitor Status window. The status keeps updating at an interval of 1 second.

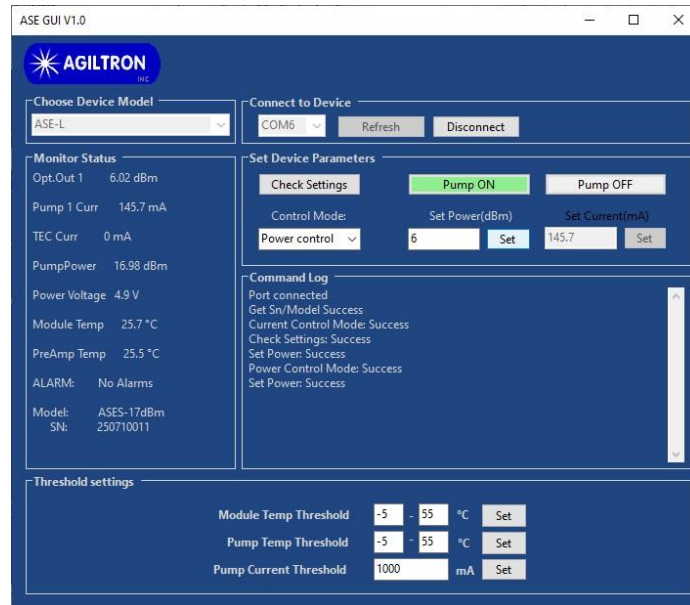


Figure 4: Remote control software: successful connection to ASE

#### 8) Check Setting

Click to get the settings from the ASE.

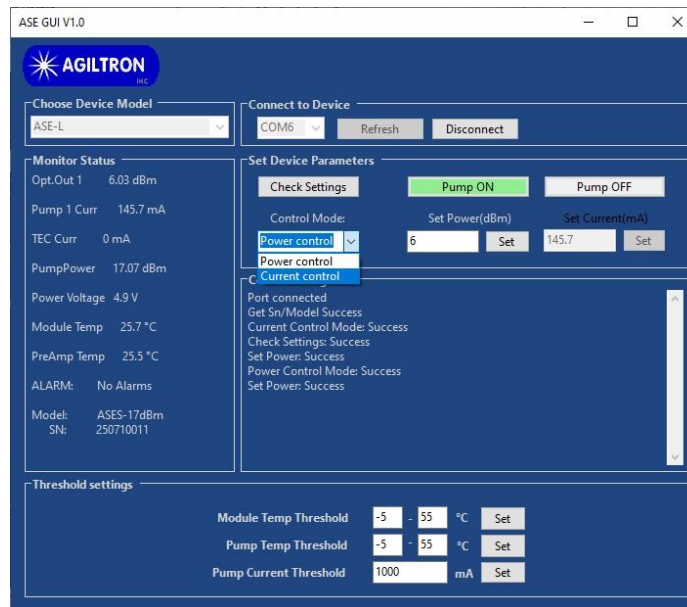


Figure 5: Remote control software: control mode selection

#### 9) Control Mode Selection

Click 'Control Mode' button to get the current mode setting of the ASE.

- Power Control: constant power control mode
- Current mode: constant current control mode

Select the desired mode and input setting value into the corresponding ‘Set Power(dBm)’ or ‘Set Current(mA)’ box, then click ‘Set’ button.

#### 10) Save Settings

All current settings will be automatically saved to ASE when any ‘Set’ button is clicked, including output power level and control mode.

When turn on the ASE next time it will run under saved settings, even without GUI connection.

#### 11) Emission ON/OFF

Click ‘Pump ON’ or ‘Pump OFF’ button to turn on/off the output of EDFA.

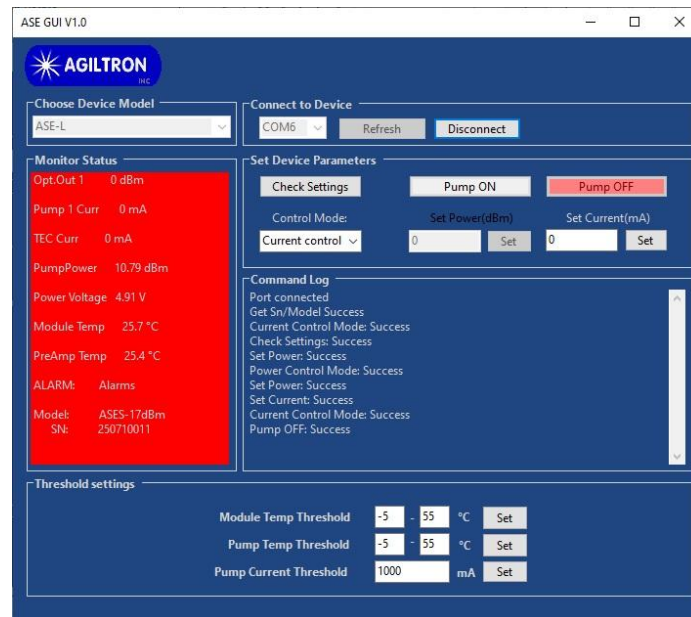


Figure 6: Remote control software: output is turned off.