

TOUCH INTERFACE

- 1.2 - 8.0 μm Wavelength Range
- SMA-905 Fiber Connector
- Reflection From Any Sample
- 1 - 2 mm Collection Area



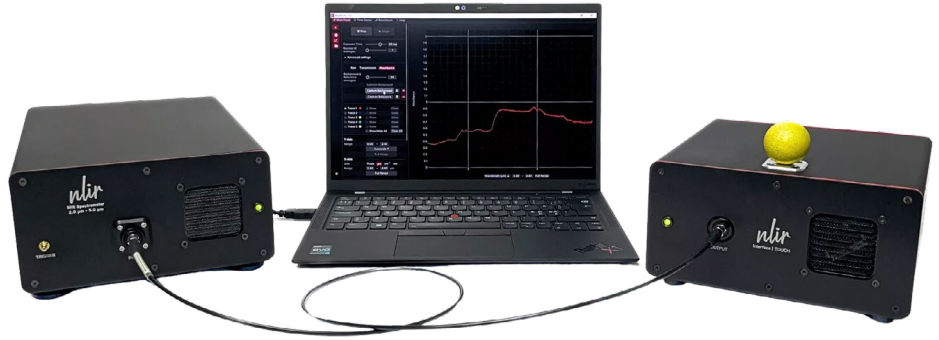
THE TECHNOLOGY

INTERFACE | TOUCH

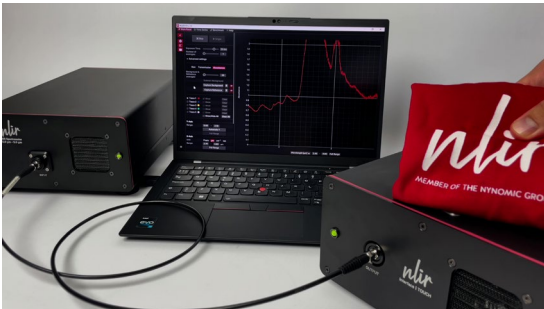
NLIR's TOUCH Interface is a device that helps bring light to and from a sample when performing reflection measurements.

It has a built-in wide-band light source and after being reflected on the sample, the light is coupled into a connected fiber to conveniently bring it anywhere. The TOUCH Interface is designed to work with differently shaped sample surfaces while at the same time minimize background signal.

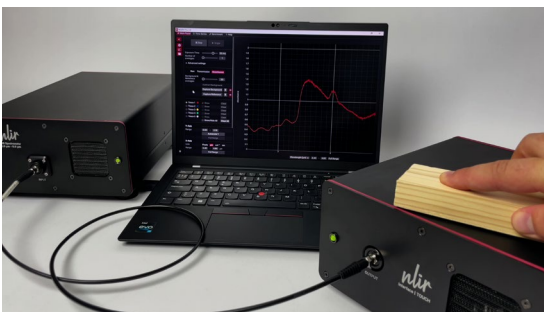
It works excellently with NLIR's MIDWAVE Spectrometer ■



DETAILS



Reflection measurements of cotton fabric using NLIR's TOUCH Interface.



Reflection measurements of raw wood using NLIR's TOUCH Interface.

TOUCH Interface

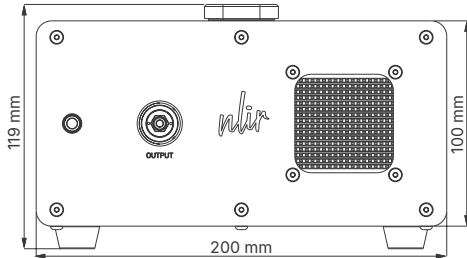
Optical Bandwidth	1.2 – 8.0 μm
Collection Spot Size	< 2 mm
Light Source	1050 °C Silicon Carbide
Optical Interface	Free-Space
Lifetime ¹	> 1800 hours
Optical Output	SMA-905 Fiber Connector
Power Consumption	22- 25 W
Supply Voltage	19 V
Measurements (L × W × H)	200 × 200 × 100 mm
Weight	2.5 kg

¹ Typical point of time where output starts to decrease, source will show end-of-life status

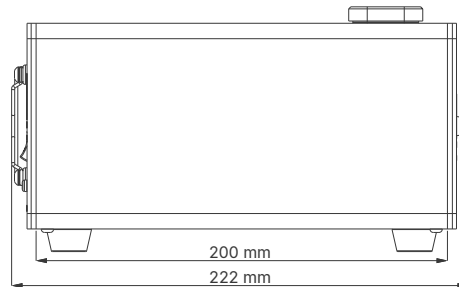
TECH DRAWINGS AND APPLICATION EXAMPLE

TECH DRAWINGS

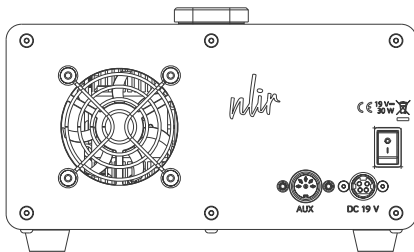
FRONT



SIDE



BACK



DESCRIPTION

The drawings provide detailed dimensions and an overview of the NLIR's TOUCH Interface's design.

NLIR's TOUCH Interface is equipped with a green LED on the front panel to indicate proper operation. It features a SMA fiber connector at the output port on the front for easy connection to optical fibers. On the back it includes a 19 V DC power supply input and an AUX port, allowing it to receive power directly from NLIR spectrometers for seamless integration.

Note that all measurements are in mm.

EFFORTLESS REFLECTION MEASUREMENTS

The graph shows how simple it is to conduct reflection measurements of various samples with NLIR's TOUCH Interface.

Here, it demonstrates the absorption of three different samples: soft black foam, cotton and polyester textile and a banknote.

The exposure time used was 50 ms and no averaging or other data processing was applied ■

