

# PACTO SPECTROMETERS



## COMPACTLINE



Meet the Pacto, a lightweight spectrometer optimized for the best performance in system integration. The Pacto is compatible with Avantes light sources, accessories, and AvaSoft software.

**POWERFUL.  
VERSATILE.  
COMPACT.**

## PACTO SPECTROMETERS

To make the Pacto suitable for everyone, we offer three variations to match your application's needs.

### 1. Pacto

Available with 2048 or 4096 pixel detector, and USB-powered with strengthened pigtail

### 2. Pacto Link

Allows you to use a different communication protocol (RS232 or SPI) for smooth integration

### 3. Pacto Bench Only

The Bench Only let's you combine our optical engine with your own electronics

## WHY THE PACTO?

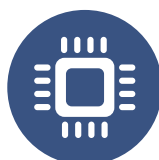
- Compact size
- Improved optical bench design
- Smooth product or system integration
- Produced with AvaMation for unsurpassed inter-instrument reproducibility & scalability
- Outstanding stray light performance
- Strong signal-to-noise ratio
- USB-powered with pigtail
- Multiple variations available

## APPLICATIONS & INDUSTRIES

The Pacto is suitable for a wide variety of applications and industries. Such as, but not excluded to;



**Agriculture & Food**  
Food Sorting  
Precision Agriculture



**Semiconductor**  
Thin Film Coating  
End-Point Detection



**Environmental**  
Contamination &  
Pollution Monitoring



**(Bio)Medical**  
Blood Analysis  
Cancer Detection



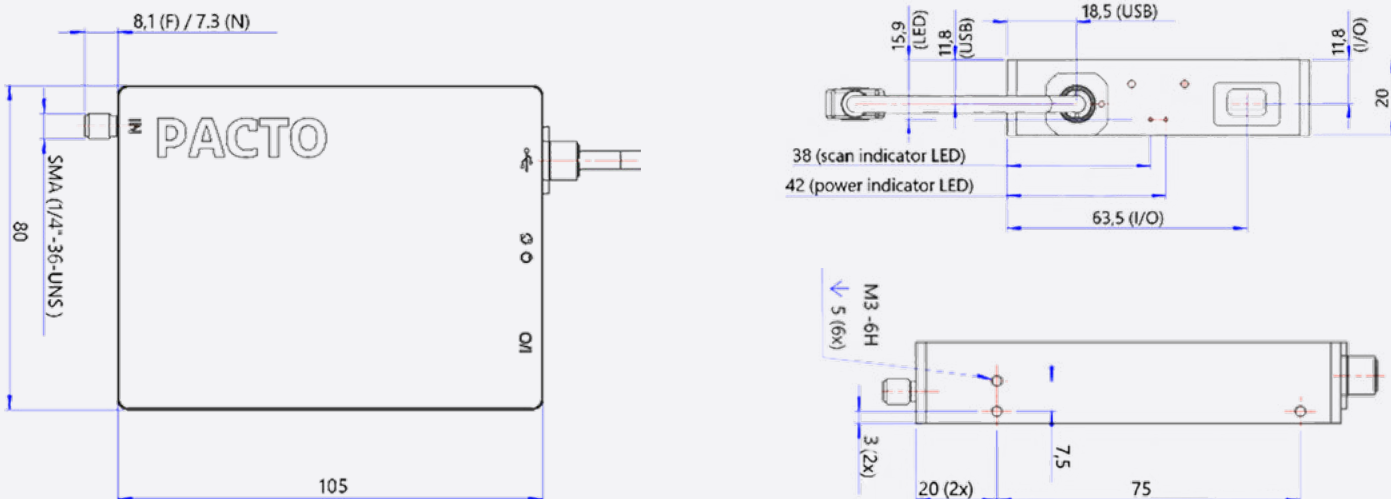
**System Integration**  
Integrate into your  
product or system

# SPECIFICATIONS PACTO

The information on this page relates to the USB-powered Pacto. Scan the QR-code below for the specifications of all Pacto variants.

	Pacto 2K	Pacto 4K
Optical Bench	Symmetrical Czerny-Turner design, 75 mm focal length; Pacto bench	
Wavelength range	200 - 1100 nm	
Stray light	0.1 - 1% (typical value 300l/mm, blaze 250nm < 0.3%)	
Sensitivity	365.000	261.000
Detector	HAM S11639, CMOS linear array, 2048 pixels (14x200 µm)	HAM S13496, CMOS linear array, 4096 pixels (7x200µm)
Signal/Noise	375:1	365:1
Dynamic Range	4500	
Dark noise	15 cnts	
AD converter	16-bit, 6 MHz	
Integration time	9 µs – 30 s	
Interface	USB 2.0 (480Mbps) / pigtailed (38cm) USB-A	
Sample speed on-board averaging	1.15 ms /scan	1.19 ms/scan
Data transfer speed	1.15 ms /scan	1.19 ms/scan
Digital I/O	5 bidirectional programmable I/O; 1 Analog out, 1 Analog in, 1x5V	
Dimensions, weight	105 x 80 x 20 mm, 277,5 grams	
Power supply	Default USB power, 500 mA	
Temperature range	5-55 °C	

## DIMENSIONS



## FULL PRODUCT OVERVIEW & SPECIFICATIONS

Scan the QR-code for the full Pacto overview, grating options, ordering options, and more. Discover the flexibility of the Pacto and find your ideal variation.