



# In-line Power Monitor

PPAA1xx, Product Specifications



The PPAA1xx in-line power monitor solution provides insight into the power level in your measurement system, without disturbing the optical path and with very low insertion loss. The device continuously monitors the power level in the fiber and when power is detected it automatically activates.

Thanks to the unique power detection technology, the light is detected in the forward direction only, while the the insertion loss is low in both directions.

The device is powered by 3 built-in AAA batteries or can be powered through the USB-C interface. The USB-C interface can be used (optional configuration) for SCPY communication between a PC and the monitor.

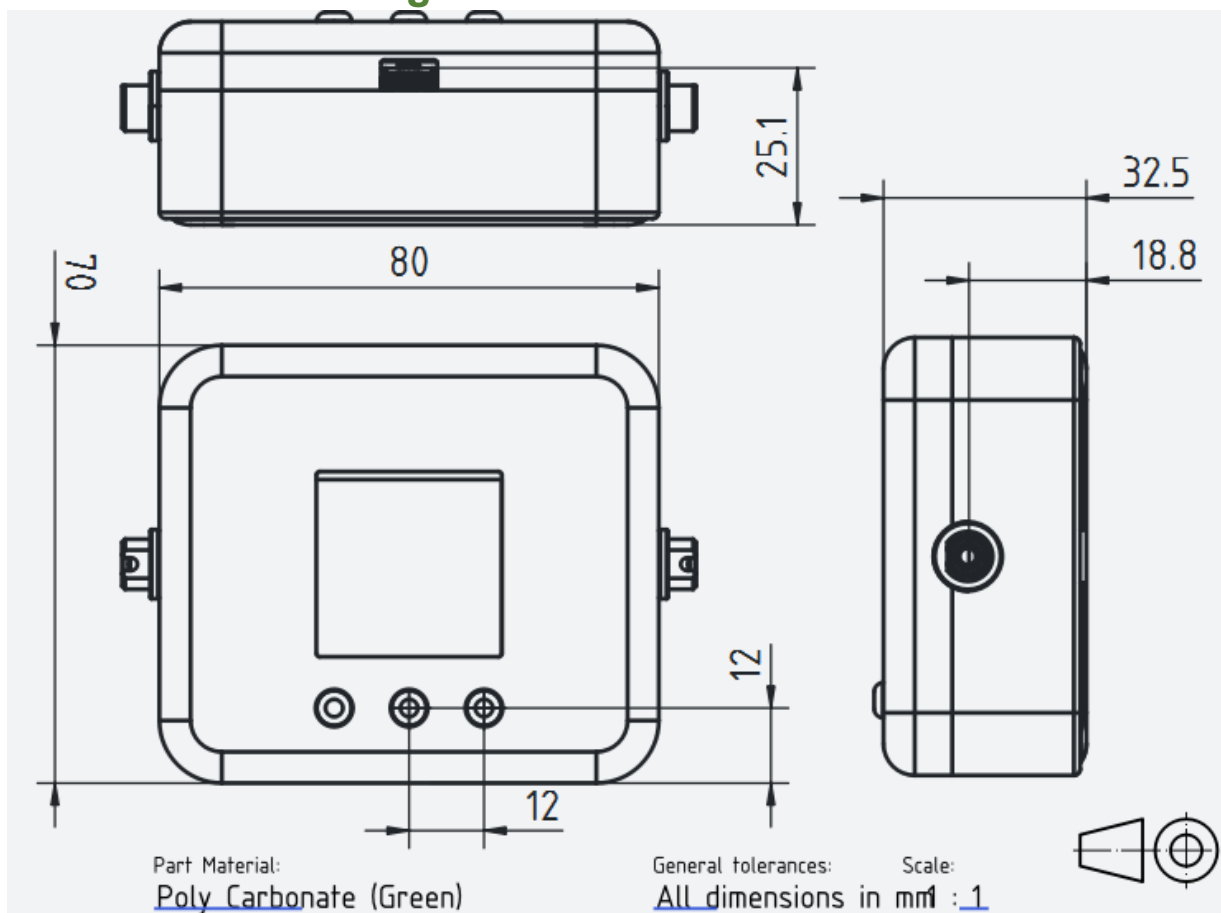
The unit can optionally be configured with a 30dB+ VOA (Variable Optical Attenuator) that can be configured at a fixed attenuation or at a fixed output power.

The unit can optionally be configured with PM (Polarization Maintaining) fiber.

## 1. Specifications

	High Sensitivity	High Power
Power Range (input)	-50 - +15 dBm	-40 - +25 dBm
Insertion Loss		
no VOA	< 0.5 dB	< 0.2 dB
VOA	< 1.1 dB	< 0.8 dB
Absolute Accuracy	< 0.2 dB	
Polarization Sensitivity (SMF)	< 0.3 dB	
Frequency range – standard range	1510 – 1610 nm	
Frequency range – extended range	1280 – 1580 nm	
Frequency range – PM fiber	1540 – 1610 nm	
Calibrated Frequency – standard range	1550 nm	
Calibrated Frequency – extended range	1310 / 1480 / 1550 nm	
Calibrated Frequency – PM fiber	1550 nm	
Directivity	30 dB	10 dB
Optical Return Loss	-70 dB	
Power source	3x AAA batteries or USB-C	
Operating time on batteries	2 yrs	
No input power (checking every 5 seconds)	> 48 hrs	
display on continuously, low power setting		
Display resolution	0.01 dB	
Display Refresh Rate	100 ms	
Display Activation Time (when asleep)	<5 seconds	
Operating temperature	10 C – 50 C	
Storage temperature	-10 C – 60 C	
Size	80mm x 60mm x 20mm	
Weight	<150 grams	
Housing Material	Poly Carbonite	
<b>With VOA (not compatible with extended range)</b>		
VOA absorption range	>30 dB	
<b>With PM fiber</b>		
Polarization Extinction Ratio	>20 dB	
<b>Communications (All versions except B version has communications interface enabled)</b>		
Port	USB-C	
Interface	Virtual COM port (FTDI)	
Language	SCPY	

## 2. Mechanical Configuration



### 3. Ordering

PPAA1	X	Y	- Z
	1 = SMF High Sensitivity	0 = Standard	Empty = FC/APC adapters
	2 = SMF High Power	E = Extended Range (SMF only)	-15 FC/APC pigtail
	3 = PMF High Sensitivity	V = VOA (standard range)	-35 SC/APC pigtail
	4 = PMF High Power	B = No USB communication	-45 LC/APC pigtail

For example, the PPAA11B would be the lowest cost option without USB communications. The PPAA12V-35 would be a standard 1550nm SMF version with integrated VOA and SC/APC pigtail input/output.