

PSI (Photon Systems Instruments), spol. s r.o. Drasov 470, 664 24, Czech Republic +420 511 440 012 info@psi.cz VAT: CZ60646594

TECHNICAL SPECIFICATION

FluorPen FP 110 PAR-FluorPen FP 110

Protocols	
PAR-FluorPen FP 110	 Ft – instantaneous chlorophyll fluorescence Quantum Yield
	- OJIP
	- Non-photochemical quenching
	- Photosynthetically Active Radiation (measured as PPFD)
FluorPen FP 110	- Ft – instantaneous chlorophyll fluorescence
	- Quantum Yield - Q.IIP
	- Non-photochemical quenching
	- Light curve
LED lighting	
LED emitter	Blue (470 nm), other wavelengths on request
Saturating pulse Illumination	Up to 3,000 μ mol(photon).m ⁻² .s ⁻¹ (adjustable from 10 to 100%)
Actinic Illumination	Adjustable from 10 to 1,000 μmol(photon).m ⁻² .s ⁻¹
Measuring Illumination	Up to 0,09 μ mol(photon).m ⁻² .s ⁻¹ per pulse (adjustable from 10 to 100%)
Detector	
Туре	PIN photodiode with bandpass filters
Wavelength range	From 667 to 750 nm
Data storage and transfer	
Internal memory capacity	Up to 16 Mb
Internal data logging	Up to 149,000 measurements (depending on protocol)
Data transfer	USB cable Bluetooth (transfer up to 3Mbps for distance up to 20m)
PC software	FluorPen 1 1 (Windows 7 and higher)
Battery	
Туре	Li-Ion rechargeable battery
Capacity	2000 mAh
Max. charging current	0.5 A
Charging	Via USB port - PC, power bank, USB charger, etc.
Battery life	48 hours typical with full operation (low battery indicator)
Other	
	Standard leaf-clip (FP 110/S)
Sample holder	Detachable leat-clip (FP 110/D) Probe (FP 110/P)
PAR sensor cosine correction	Cosine corrected up to 80° angle of incidence
Display	Graphical display
Kovpad	Sealed, 2-key tactile response
	Turns off after 5 minutes of no use
Built in GPS module	Ultra-high sensitivity down to -165dBm

www.psi.cz



PSI (Photon Systems Instruments), spol. s r.o. Drasov 470, 664 24, Czech Republic +420 511 440 012 info@psi.cz VAT: CZ60646594

	High accuracy of <1.5 m in 50% of trials
Size	134 x 65 x 33 mm
Weight	188 g
Operating conditions	Temperature: 0 to +55 °C Relative humidity: 0 to 95 % (non-condensing)
Storage conditions	Temperature: -10 to +60 °C Relative humidity: 0 to 95 % (non-condensing)
Warranty	1-year parts and labor