

Order number/ Artikelnummer FP-MVpulse  
Module/ Bezeichnung FP-MVpulse Produktdatenblatt

## Basic properties/ Allgemeine Eigenschaften:

Spectral range/ Wellenlänge 640nm, 660nm, 785nm  
Output power/ Ausgangsleistung 10mW-100mW (peak power)  
Operating voltage/ Versorgungsspannung 4,5-30V  
Current consumption/ Stromverbrauch < 200mA @5V (supply current)  
Operating temperature/ Betriebstemperatur 640nm: 0° to +50°C, 660nm/785nm: 0° to +60°C (housing temperature)  
Storage temperature/ Lagertemperatur -20°C bis +60°C  
Modulation/ Modulation digital high/low active, 0 - 20kHz, pulse length and duty cycle limited, higher frequency on request  
Power stability/ Leistungsstabilität ≤ 5% (after warm up at 25°C)  
peak power increase compared to cw mode in same laser class 5x @ pulse length<0.38ms, duty cycle<0.2  
3x @ pulse length<2.9ms, duty cycle<0.3  
2x @ pulse length<15ms, duty cycle<0.5  
Wavelength stability: <0.25nm / °C

## Beam properties/ Optische Eigenschaften:

Beam profile/ Strahlcharakteristik laser line with uniform power distribution (FOV on request)  
Focus distance/ Fokussabstand adjustable by pin tool (see instruction manual for details) | FIX are prefocused in manufactory  
Boresight deviation/ Strahlrichtungsfehler ≤10 mrad (≤3 mrad as option)  
Pointing stability/ Punktstabilität ≤10μrad/°C (improved pointing stability as option)  
Fan angle/ Öffnungswinkel 5, 10, 15, 20, 30, 45, 60, 75, 90 deg.  
Line thickness/ Liniendicke Standard, DL, DLE, DLSE, TS1, TS2  
Line intensity variation/ Homogenität ± 20 % (opt. ± 10 %) related to average power (within 80% of the line)  
Line straightness/ Geradheit ± 0,1 % ( ±0,05 as option)

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BANKVERBINDUNG Sparkasse Bodensee  
IBAN DE 40 6905 0001 0001 0270 28  
BIC/SWIFT SOLADES1KNZ

## Mechanical properties/ Mechanische Eigenschaften:

Housing material/ Gehäusematerial	Aluminum (blue anodised; potential free)
Housing size/ Abmessungen	ST-F: $\varnothing=19 \times 80$ mm, ST-FIX: $\varnothing=19 \times 65$ mm (without M12 connector)   2H: (OH=MVnano-F/FIX: $\varnothing 11,5 \times 40$ mm/ $\varnothing 11,5 \times 29$ mm) + electronics: $\varnothing 19 \times 42$ mm, connected by 150mm wire
Pin definition/ Anschlussbelegung	M12 connector: Pin1: +VDC, Pin3: GND, Pin2: dig. modulation   wire: brown: +VDC, blue: GND: black: dig. Modulation
Laser class/ Laserklasse	2 (DIN EN 60825-1:2014)