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Onera

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Date: **26.09.2022**

Produktionsauftrag

Pos. Product & Description Our Article No. Your Article No. Qty.

copied from offer A22.0191 from 2022-09-17

1.0 PM7-VIS_20 A00010 - 1

Resonant, free-space electro-optic PHASE modulator for VIS Laser applications

- PM7-series: select fixed resonance frequency within 2 30 MHz
- optimised resonance frequency/-ies fo: { 20 } MHz (separate device for ea. frequency)
- frequency tolerance: typ. fo +/- 0.5 MHz | RF bandwidth (-3dB): typ. 1 2% of fo
- RF connector: SMA-f, straight | impedance @ fo: ca. 50 Ohms, return loss (S11): typ. < -10dB
- housing dimensions: 40x40x40mm^3 | mounting: 3x M4 for s- & p- pol.
- user wavelength λo: 480 nm | crystal aperture: 3x3mm^2, CA ≥ 90%
- BBAR: **360 650 nm** (Ravg < 1%) | wavefront distortion (WFD): $< \lambda/6$ (633nm)
- max. recommended laser intensity @ {369, 650} nm: ca. **{0.01, 5} W/mm^2**
- modulation efficiency @ (1rad, fo, λo): typ. < 10 dBm | max. RF power (stable operation): ca. 0.5W
- applications: Laser Frequency Stabilisation LFS (PDH, FM/MTS)
- CoO: GERMANY, HS code: 90139080, RoHS compliant, net weight: 0.125kg

1.1 +W A00203 - 1

Crystal Wedge option:

- function/purpose: RAM suppression caused by e.g. polarisation misalignment & etalon effects
- Ref.: Vol. 41, No. 14 / July 15 2016 / Optics Letters 3331
- number of wedged facets: 1 (one) | wedge angle: 4° | anti reflection coating as stated above

1.2 +TXC A00210 - 1

Temperature Control option:

- function/purpose: active temperature stabilisation of the modulator / crystal:
- incl. thermal crystal mount
- internal T-sensor (10k NTC or PT1000) | TEC (30x30mm^2, 12V, 4A, >30W)
- incl. mounting hardware (plastic screws, spacer, etc.) | for external temperature control (< 0.1K)

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Document number: A22.0191-2

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1.3	+DC	A00209	-	1
	Extra DC-port option: - function/purpose: Active RAM suppression via voltage feedback on the crystal - Ref.: . Zhang, et. al. OPTICS LETTERS / Vol. 39, No. 7 / April 1, 2014 - Bandwidth (-3dB): 0 - 10kHz connector: SMA-f, bulkhead (max. +/-500V), - Halfwave voltage: (@ 400 770nm): ~ 130 240V - Note: DC-port reduces the AC modulation efficiency by ca. 3dB			
2.0	Shipping & Packaging	A01160	-	

Shipping date: Donnerstag, 20. Oktober 2022

1 Parcel: 20x12x10cm^3, 0.5kg, VW=0.5kg | not subject to any discounts