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MODEL REM
EO MODULATORS
DATA SHEET 731

MODEL REM-101 EO MODULATORS

RESONANTLY TUNED ELECTRO-OPTIC MODULATORS

Quantum's **REM** (Resonant Electro-optic Modulator) modulators have efficient power transfer of the electrical energy to the electro-optic crystal of Lithium Tantalate. By applying the power to the crystal through a low loss LC tuned circuit, drive power is significantly reduced. The devices are specially made with good optical quality, high laser damage material and lowest insertion loss. The modulators are made with standard stock components and tailored to suit your needs such as bandwidth and operating wavelength. Special Brewster types of REM are also available for wide band optical coverage and lowest loss. Other custom devices for UV (200 nm - 360 nm) and Visible region (360 - 760 nm) are made by employing BBO and KTP crystal material.

SPECIFICATIONS

PARAMETER	MODEL REM-101
Material	LiTaO₃
Wavelength	550nm ~ 3000nm
AR Coating Bandwidth	0.55-3.0 um
Aperture	3 mm
RF bandwidth	1-2 %
Connector Type	SMA
Impedance	50 ohm
Max RF power	2 watt
Max Optical Power	1 Watt/mm²
Modulation Depth	Pi shift easily attainable, usually 0.1 Rad/Volt
Half wave Voltage	<20 Volt
Max VSWR	1.5:1

Driving your EO modulator is easy with Quantum's Series 31 system drive amplifiers from 0.1-1000 MHz available with or without the 300 VDC bias option which sets the optical bias in amplitude modulators (see data sheet 769).