

LEYSOP LTD

Low Voltage Electro-Optic Light Modulators

Type: EM 200A, EM 200K & EM 200L



EM 200A

This is a low voltage ADP transverse modulator designed to operate at all wavelengths in the visible and is entirely free from piezo-electric resonances. This modulator has a high degree of temperature stability, but where long term d.c. amplitude is required it should be operated in a constant temperature environment. The modulation frequency is not limited by the device characteristics other than by its electrical capacitance and therefore depends on the drive circuit used. Wide band AR-coatings are used on all components.

EM 200K

This is a low voltage transverse KD*P electro-optic modulator designed to give maximum thermal stability beyond that obtained by the ADP type. Its transmission range is extended into the infra-red and its extinction ration is also better than that obtained from its ADP counterpart. It does however display piezo-electric characteristics.

EM 200L

This is a low voltage transverse electro-optic modulator using high damage threshold lithium niobate. It has similar characteristics to the EM 200K with an optical range extended further into the infra-red.

Product Specification

Model No.	EM 200A	EM 200K	EM 200L
Crystal Type	ADP	KD*P	LiNbO ₃
Aperture	2.2mm	2.2mm	2.2mm
Crystal Length	4 x 20mm	2 x 40mm	2 x 20mm
Half Wave Voltage at 633nm	220V	220V	220V
Crystal Orientation	45°y-cut	45°z-cut	z-cut
Wavelength Range	0.3 - 1.0μm	0.2 - 1.2μm	0.5 - 4.0μm
Windows	BK7	BK7	Quartz
Max. Continuous Applied Voltage	250	250	400
Extinction ratio	≥ 100:1	≥ 200:1	≥ 200:1
Capacitance	60pf	40pf	60pf
Cell Diameter	40mm	40mm	40mm
Cell Length	110mm	110mm	110mm
Optical Transmission	> 85%	> 90%	> 90%
Connectors	---BNC---		