

LEYSOP LTD

Manufacturers and suppliers of electro-optic components

Low Voltage Electro-Optic Light Modulators



Transverse field design

Low voltage operation

Wide transmission range

2 or 4mm apertures

ADP, KD*P, LiNbO₃ Crystal
versions available

Driver available (M250)

EM 200A / EM400A

This is a very 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 stable 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 / EM400K

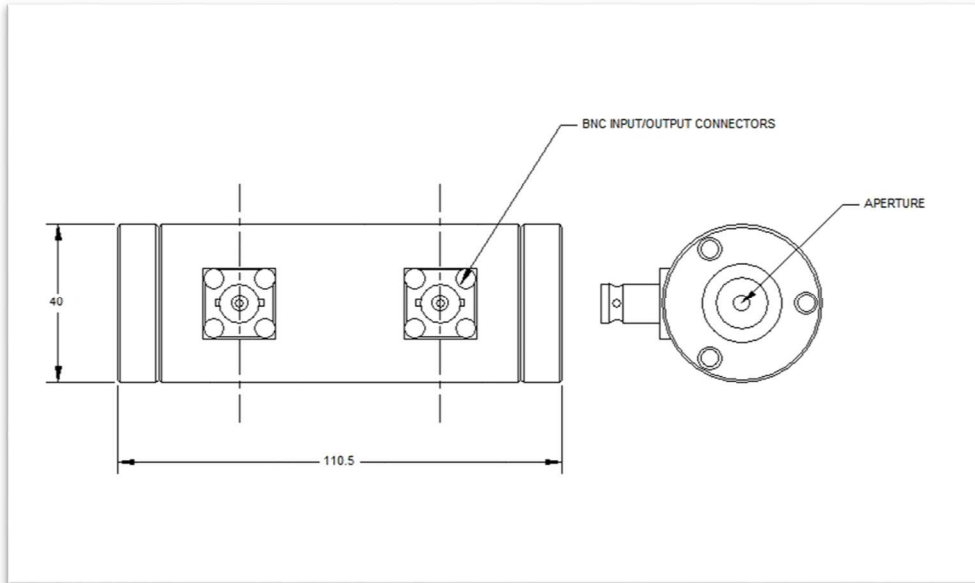
This is a low voltage transverse KD*P electro-optic modulator designed to give maximum thermal stability beyond that obtained by the ADP type. Its transmission range is extended into the infra-red and its extinction ratio is also better than that obtained from its ADP counterpart. It does however display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

EM 200L / EM400L

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.

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Product Specifications

Model No.	EM200A	EM400A	EM200K	EM400K	EM200L	EM400L
Crystal type	ADP	ADP	KD*P	KD*P	LiNbO ₃	LiNbO ₃
Aperture	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm
Crystal Length	4 x20mm	4 x20mm	2x40mm	2x40mm	2 x 36mm	2 x 36mm
Half Wave Voltage at 633nm	220V	370V	220V	370V	220V	440V
Crystal Orientation	45°y-cut	45°y-cut	45°z-cut	45°z-cut	z-cut	z-cut
Wavelength Range	0.3- 1.0µm	0.3- 1.0µm	0.2 – 1.2µm	0.2 – 1.2µm	0.5-4.0µm	0.5-4.0µm
Max: Continuous Applied Voltage	400	400	400	400	400	400
Extinction Ratio	~100:1	~150:1	~150:1	~200:1	~100:1	~200:1
Capacitance	60pf	60pf	40pf	40pf	60pf	60pf
Cell Diameter	40mm	40mm	40mm	40mm	40mm	40mm
Cell Length	110mm	110mm	110mm	110mm	110mm	110mm
Optical Transmission	>85%	>85%	>90%	>90%	>90%	>90%
Connectors:	---- BNC ----					

Specifications for guidance only, subject to modification without notice.