

# GRA-B / GRA-F

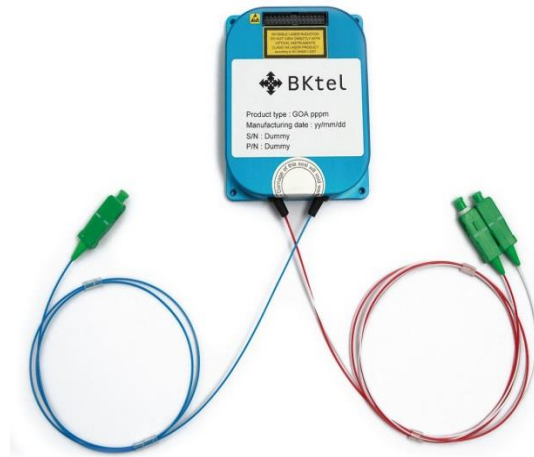
## Raman Pump Module in Backward or Forward Direction

### Applications

- ▶ Long-Haul
- ▶ Metro and Access Networks
- ▶ Single Channel Networks

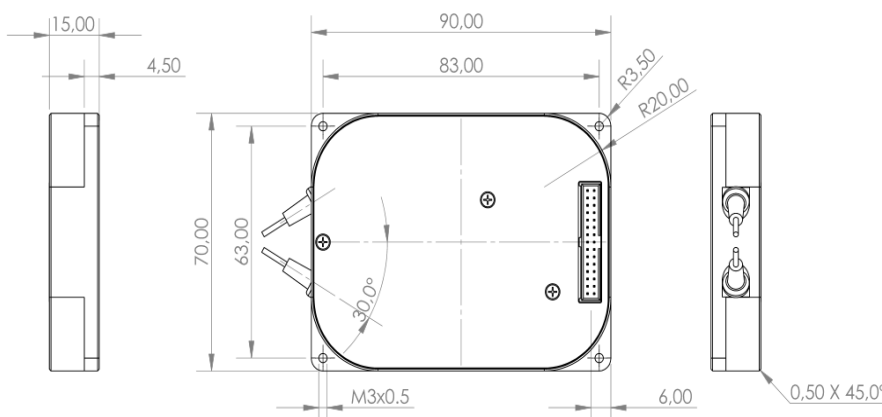
### Features

- ▶ High Pump Output Power, 700mW
- ▶ Compact MSA compliant package (70 x 90 x 18 mm)
- ▶ Digital Control System



Parameter		Backward	Forward
Wavelength	[nm]	1529 ... 1563	
Output Power	[mW]	500	
Input Power Range	[dBm]	-40 ... -5	-3 ... +23
Gain (SMF 28)	[dB]	12	10
PDG	[dB]	0.3	
PMD	[ps]	0.6	
Gain Flatness	[dB]	1.2	
Return Loss	[dB]	40	
Signal Insertion Loss	[dB]	1.5	
Power Supply Voltage	[V]	+3.3 / +5	
Power Consumption	[W]	< 15	
Operating Case Temperature	[°C]	0 ... +65	
Communication Interface		RS232 / I2C	

### Mechanical Dimensions



### Ordering Information

Custom variants are available upon request, please contact our customer service to discuss your specification requirements. Evaluation board available on request



Specifications are subject to change without notice