



Fiber Optic Backlight

Keytouch designs and manufactures front panels, membrane switches and electro mechanical operating panels with embedded fiber optic backlight.

Advantages of fiber optic backlight:

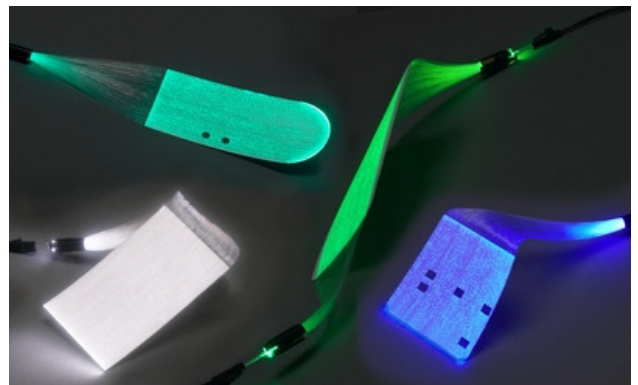
- Uniform lighting over a large area
- Low power consumption with only one LED required
- Very long operation life
- Low cost
- No heat or EMI
- Thickness 0,33 mm
- Superior tactile response
- Moisture, heat and humidity sustainable.

Build-up

Fiber backlighting material of either Woven or UniGlo fiber. UniGlo is most suitable for switches due to thickness of only 0,33 mm. Fiber sheets are constructed to specific measurements with the cable end bundled into a ferrule and connected to a LED. One 5 mm LED can fit up to 400 fibres which in turn can illuminate a 100 mm wide area. LED's can be connected to both ends of the fiber sheet to increase the length area illuminated. One layer of fiber is typically used in conjunction with a back reflector.

Technical data

Power consumption	2-4 vdc 5-30 mA(One LED)	
Thickness	0,33	mm
EMI/RFI	None	
Wear life	100.000	Hours



(Lumitex® Inc.)