



# MITRA's "Fibreless LED At Tip" Technology Era:

MITRA'S "Fibreless LED At Tip" technology innovation in flexible video endoscope, changescomplete scenario of the worldwide endoscopy market. It makes life easier for healthcare professionals as well as patients.

Fibreless LED At Tip is an extra advanced technology, to transmit a light through endoscope, small LED lamps are fixed at the end of endoscope tip which is the highly durable, long life and affordable option instead of using old, costly, short life, less durable fiber optics. This LED's has high intensity & white light illumination which helps to provide natural image quality as well as proper detection & diagnosis. No need to use or carry extra light source for this. Your endoscopy system gets compact, lightweight & easily movable.

# Why "Fibreless LED At Tip" Technology is Beneficial?



**LED** – Longer life

LED have no moving filaments or any parts that burn out or damaged, so LED's have long working hours life. LEDs last at least 10 times longer than xenon lamps and 50 times more than halogen lamps. Xenon highly specialized type of gas discharge lamp & has around 500Hours working life. Halogen have tungsten filament with high pressure gas in it, halogen has very short life span approximately 50hours only.



## Low operation, maintenance & replacement cost:

LED is highly efficient & has close to zero maintenance cost. LED light reduce maintenance & operational cost by increasing life span. Xenon lamp has high cost; they'll need to be replaced more often than LED. Replacement cost of xenon is also





high, because for installation it requires separate housing. Halogen lamp cost is comparatively less but its short life span, frequently blown out problems it's operational & maintenance cost increases.



# Reduce electricity consumption & Minimal heat generation:

LED is a semiconductor & as electrons are passing through it, it turns into light. More of the energy used in LED is converted into light & less is radiated as heat. Whereas Halogen Lamp required more energy to keep going & Xenon lamp needs more lots of energy for startup, resulting consuming more electricity.



## Waste generation and disposal make LED the most eco-friendly:

LED bulb has less power consumption; this minimizes greenhouse emissions from power plants. CO2 emissions for LEDs are also low. Manufacture & use of LED lamp causes very less damage to the environment. Long life & low energy consumption make LED the most eco-friendly.



#### High intensity and white light illumination:

LED produces very high light quality & steady light, it is not flicker. Due to LED's high lumen output, LEDs are capable of turning maximum amount of their energy into light.

GO FOR "Fibreless LED AT TIP" – GO FOR "OTTOMED Endoscopy"