LED strip to upgrade LF212 2FT 9W lamp

Application

The LED strip was developed to be compatible with the LF212 2FT 9W lamp that is widely in use in common areas of HDBs in Singapore.

An integrated state-of-the-art microwave motion detector sensor allows to save up to 97% and significantly reduces electricity bills and carbon footprint.

Environmental benefits

- Reducing power consumption and carbon footprint up to 98% during "out of work" time
- Low e-waste: LED strip upgrade produced much less waste compared to the total lamp replacement
- Longer life span due to better thermal performance (aluminium substrate) and lesser power consumption

Low upgrade cost

- LED strip is much cheaper than entire lamp
- Easy to replace: the strip has the same positions of mounting holes and wire connections points
- The strip is mechanically and electrically compatible with model LF212-840
- Simple replacement: the strip can be replaced "in-field" by simple tools like a screwdriver
- Terminal blocks for fast wiring
- Low voltage wiring: the strip utilizes the existing 30V power supply

Safety and Security

- Dim light: LED strip provides dimmed light to commuters to observe the surrounding area
- High motion sensitivity: virtually impossible to hide and stand still without triggering a light on
- Wall penetration: light would be triggered on even out of a direct sign of a commuter
- Long detection range: up to 7m for approaching/departing human

Electrical specs

Parameter	Value	Unit
Typical supply voltage, DC	20.5	V
Max. supply voltage, DC	60	V
Operational current, dimmed light mode, @20.5V	7	mA
Power consumption, dimmed light mode, @20.5V	0.15	W
Operational current, full light mode, @20.5V	340	mA
Power consumption, full light mode, @20.5V	7	W
Power saving (in dimmed light mode compared to full light mode)	97	%