TCM Series RF Wireless Lighting Module

TCM-RF-D Lighting RF Control Module
On/Off & 0-10V Dimming

Module Electrical Specifications

Input Voltage Range:	**100-277Vac**
Frequency:	**50/60 Hz Nom. (47-63 Hz Min/Max)**
AC Relay Switched Current:	**≤9A**
AC Relay Inrush Current:	**≤60A**
Input Current Module Power:	**≤0.05A power for control only**
Wattage:	**800W Max**

Module Environmental Specifications

Maximum Case Temp.	**72°C**
Operating Temperature:	**-5ºC to +50ºC**
Storage Temperature:	**-40ºC to +80ºC**
Humidity:	**5% to 95%**
Cooling:	**Convection**
Vibration Frequency:	**5 to 55 Hz/2g, 30 minutes**
Impact Resistance:	**1g/s**
EMC:	**FCC 47CFR Part 15 Class B compliant**
Weight:	**3.7oz. (105g)**

Remote Specifications

RF:	**2.4GHz RF Remote Control**
Emission Power:	**6db**
Power by:	**(2) AAA batteries (Included)**
Working voltage:	**3V**
Radio frequency:	**2400-2483.5MHz**
Modulation mode:	**GFSK**
Standby Power Consumption:	**5uA, Control distance 65 - 98 feet**
Size:	**4.33in Long x 2.12in Wide x 0.78in Height**
Low Battery Indicator:	**When the red LED indicator on the face of the remote control remains on it means batteries need to be changed.**

- RF Cordless Remote Wireless Control for Luminaires
- 2.4GHz, +8dBm RF
- ON/OFF and 0-10V Analog Dimming Control, 100mA Sink
- Compatible with LED Drivers & Electronic Ballasts that comply with IEC60929 Annex E2, 0-10V Dimming
- ON/OFF switching up to 277Vac @9A Max
- Stores last dim setting even when driver is powered off by the module
- Dust Proof Design IP50
- Gray 5VA PC ABS Plastic Case
- UL Dry & Damp location rated
- TCM-RF-REMOTE 2.4GHz RF handheld controls on/off as well as brightness when programmed to TCM-RF-D modules
- Each TCM-RF-D module can be synced to 20 separate remotes max
- Each TCM-RF remote can be synced to 20 separate modules per group max
- Designed for one module per luminaire
- UL2043 Plenum Rated for use in ceiling spaces
- 5 year warranty

Controllers	
Model Number	**Description**
TCM-RF-D	Thomas Control Module - RF Cordless Dimming Control

Class 2: US/Canada

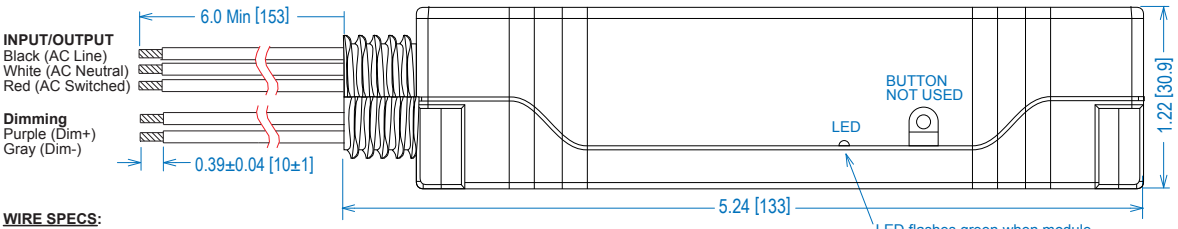
Accessories	
Model Number	**Description**
TCM-RF-REMOTE	Thomas Control Module - RF Cordless Remote

E359020 IP50

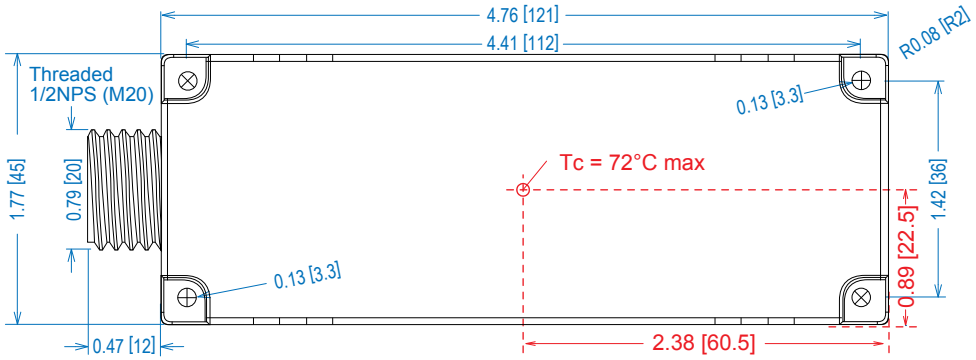
Specifications subject to change without notice.

Rev 7-1-16

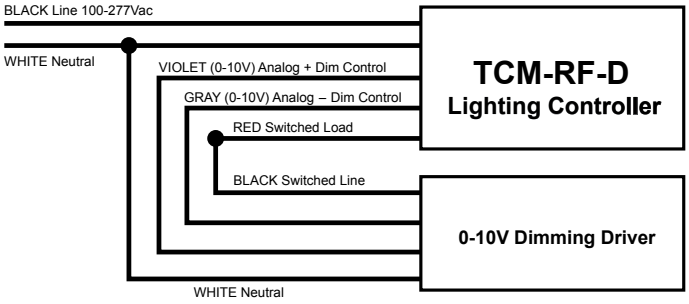
Dimensions - Inches (mm)



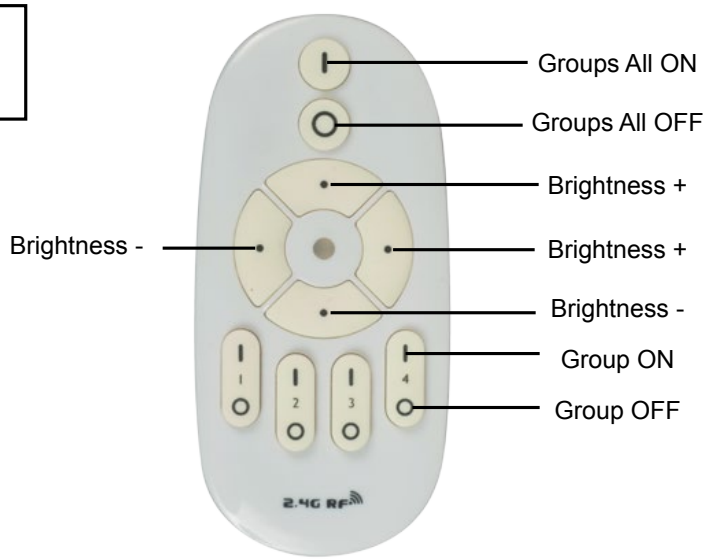
WIRE SPECS:
Input Leads: 18 AWG, rated 600 V, 105C, min.
Output Leads: 18 AWG, rated 600 V, 105C, min.
Dimming Leads: 22 AWG, rated 300 V, 105C, min.
All wires are stranded with solder dipped ends.



Typical Application Circuit



Safety Cert.	Standard
UL/CUL	UL8750 & CAN/CSA C22.2 No. 250.13, UL2043 Plenum Rated
CE	EN 61347-1, EN61347-2-13
EMC Standard	**Notes**
Withstand Voltage Relay	Input to Output Across Relay Contacts: 700 Vac
Withstand Voltage AC In to Dim Out	Input to DIM: >1750 Vac
Dimming Circuit	UL & cUL Isolated Class 2, Dim+ Purple/Dim- Gray
FCC Part 15	Class B
EN61000-4-5	2kV L-N, 8/20 µsec surge protection



TCM-RF-REMOTE

UL Conditions of Acceptability

See website for additional information