



# TCM-RF-D Series RF Wireless Lighting Module

Line Voltage Control Module with On/Off & 0-10V Dimming

Rev 8-8-2017

Intelligent Device  
**ECOSYSTEM**  
dynamic

## Module Electrical Specifications

Input Voltage Range:	100-277 Vac
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:	-5°C to +50°C
Storage Temperature:	-40°C to +80°C
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:	8dbm
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	Description
TCM-RF-D	Thomas Control Module - RF Cordless Dimming Control

Class 2: US/Canada

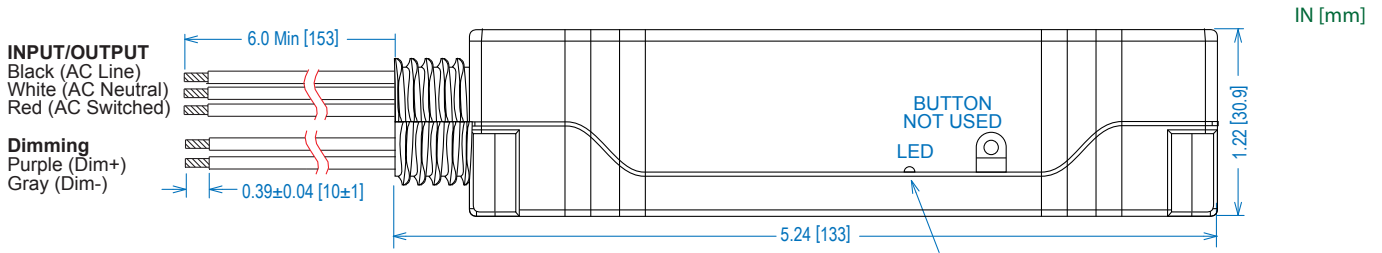
## Accessories

Model	Description
TCM-RF-REMOTE	Thomas Control Module - RF Cordless Remote

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 usec surge protection

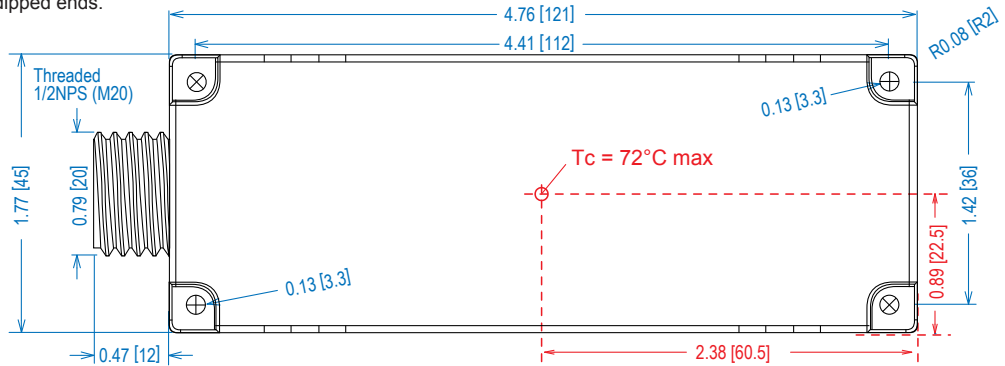


## Dimensions

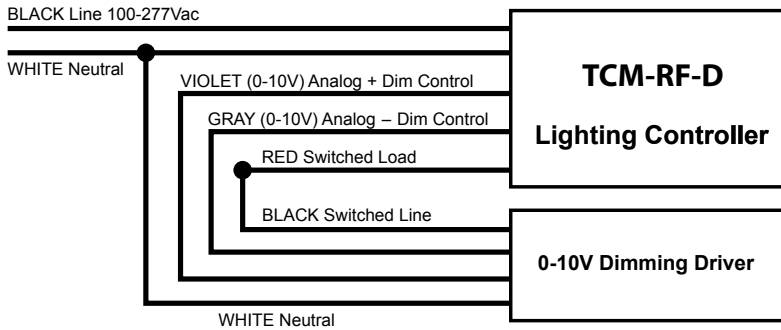


**WIRE SPECS:**

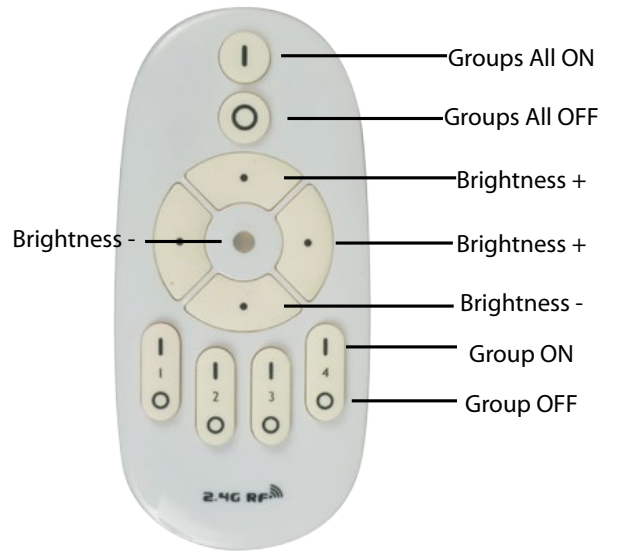
**Input Leads:** 18 AWG, rated 600 V, 105C, min.  
**Output Leads:** 18 AWG, rated 600 V, 105C, min.  
**Dimming Leads:** 22 AWG, rated 300 V, 105C, min.  
All wires are stranded with solder dipped ends.



## Typical Application Circuit



## RF Remote



**TCM-RF-REMOTE**

## UL Conditions of Acceptability

See website for additional information