# Intelligent Controllers & Collaborators



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### INTELLIGENT CONTROLLERS & COLLABORATORS: DUPLEX SERIES

The core of the TraffiCalm® Flashing Sign systems, the Intelligent Controllers and Collaborators, are the "brains" of the group. These devices handle everything from flash rate to automatic brightness control to scheduling.

Each Controller or Collaborator allows inputs from a TraffiCalm Smart Radar Sensor and one additional activation device, like a pushbutton or a sensor. Additionally, it has outputs for two flashing LED rings, rectangular rapid flashing beacons, or round beacons, for example. The Flashing Sign Systems' possibilities are endless.

### FEATURES

### **Easy Configuration and Setup**

Quick configuration via TC-Connect, a Wi-Fi connection platform developed by TraffiCalm that requires NO Internet Connection! With any browser enabled device, the installer can easily log on and select from multiple options and settings including Flash Duration, LED Brightness, and Dimming Control. Optional TC-Remote compatible controllers allow agencies to remotely connect to multiple TraffiCalm Flashing Sign Systems in one easy-to-manage web-based platform.

### **Ruggedized Electronics**

All electronics are fully epoxy-potted and environmentally sealed. The entire Controller or Collaborator, solar panel, batteries, radar, and Flashing LED Sign Ring can be fully submerged and still operate. (Not intended for underwater installations)

### **One Controller - Multiple Applications**

Each TraffiCalm Intelligent Controller or Collaborator can be configured to be an All-Flash System, Push-2-Cross System, Intelligent Beacon(s), Sequencing Chevron System, Conflict Intersection or High Water Warning System.

### Made in the USA

TraffiCalm Controllers and Collaborators are manufactured in the USA in an ISO 9001:2015 certified facility. Build America/Buy America Compliant.





### **Duplex Series**

## TRAFFICALM

### SPECIFICATIONS

### Physical Descriptions

Mounting: Universal bracket accommodates most industry standard round or square posts of suitable load

Designed for retrofit installation to existing infrastructure

NEMA 4X Fiberglass Cabinet with padlock latch

All electronics potted for weatherproofing

Stainless fasteners used for corrosion resistance

Equipment: -29.2° F to 165.2° F operating range(-34° C to +74° C)

### Input/Output

Inputs: 2 per Controller. Optional input devices include push buttons, environmental sensors, over-height sensors, and others

Outputs: 2 per Controller or Collaborator, 20W max requirement. Output devices include: Sign Rings, Rectangular Rapid Flashing Beacons (RRFBs), and Round Beacons

Radar Port: Accepts input from TraffiCalm® Smart Radar Sensor

Light sensor for configurable auto-dimming feature based on ambient light conditions

### System Requirements

Each "system" will have a maximum of one Controller. Additional signs on separate poles or posts in the system are run by Collaborators. For example, in a crosswalk there should be one Controller on one side of the street and one Collaborator on the other side of the street. When a push button is activated on either side of the street, both poles with rectangular rapid flashing beacons and rings flash simultaneously.

#### Controllers/Collaborators Integrated with Solar/Battery Kits

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	Duplex Series 20 Watt	Duplex Series 30 Watt	
Intelligent Controller Intelligent Collaborator TC-Remote Compatible Controlle	M75-SA30M-CTL2 M75-SA30M-CLB2 M75-TCR0M-CTL2	M75-SA30M-CTL3 M75-SA30M-CLB3 M75-TCR0M-CTL3	
Weight	36 lbs/16 kg 39 lbs/17 kg		
Dimensions	15.35″Wx14.17″Hx1.18″D (39 cm, 36 cm, 3 cm)	14.17"Wx22.44"Hx1.18"D (36 cm, 57 cm, 3 cm)	
AC/Solar	Integrated Solar	Integrated Solar Integrated Solar	
Battery	AGM, 24Ah, 12V AGM, 24Ah, 12V		
Solar Panel	20W/1.16A (included)	//1.16A (included) 30W/1.74A (included)	

### ■ TC-Connect<sup>™</sup> User Interface

Wi-Fi Connectivity: No Internet Connection required

Mode Selection: Pedestrian Crossing, Curve Warning, All Flash, Conflict Intersection, High Water Warning

Configurable Flash Duration (60 flashes/minute by default)

Retrievable activation logs are stored for at least 365 days

On screen status reporting includes: Controller & Collaborator(s) signal strength, flasher output voltages, input voltage (battery or AC devices), charging voltage, & firmware versions

### Radio Communication Between Controllers and Collaborators

Wireless activation within 100 milliseconds

Maximum Wireless range of 3,500 ft (1066.8m) line of sight (Performance varies by local environment and configuration of installation)

FCC Part 15, IC RSS standards compliant 2.4GHz radio

Through hole mounted 2.4 GHz antenna

### Warranty and Service

**Duplex Series** 

5 year limited warranty, 1 year on batteries

Unlimited tech support from US based factory technicians

For 20W and 30W 25Ah Models

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M75-SA30M-CTL2 M75-SA30M-CLB2 M75-TCR0M-CTL2	14.7 in 36 cm	10.8 in 27.5 cm	15.35 in 39 cm	11.2 in 28.5 cm
M75-SA30M-CTL3 M75-SA30M-CLB3 M75-TCR0M-CTL3	22.44 in 57 cm	10.8 in 27.5 cm	14.17 in 36 cm	11.2 in 28.5 cm