

ITE, Caltrans & California Energy **Commission Approved**

LED Signal Modules and Pedestrian Signals







Traffic **CEC | Traffic Signals**

California Energy Commission Approved

LED Traffic Signal Modules

All of the LED traffic modules featured in this brochure are fully certified to the requirements of the State of California's Appliance Efficiency Program. Dialight is the first LED signal module manufacturer to fully support these requirements and has received certification for both Caltrans and ITE approved products.

According to the section in CEC requirements entitled "Traffic Signals for Vehicle and Pedestrian Control" all Federally regulated traffic signals for vehicle and pedestrian control manufactured on or after January 1, 2006 shall have a nominal wattage and maximum wattage no greater than the values shown in table M-1, and shall be installed with the compatible electrically connected signal control interface devices and conflict monitoring systems". CEC also has additional requirements for pedestrian signals that are not federally regulated. These requirements can be found in table M-2 of the CEC requirements. For reference a copy of tables M-1 and M-2 from the CEC requirements are shown below.

Table M-1

Standards for Traffic Signals for Vehicle and Pedestrian Control

Appliance	Maximum Wattage (at 74°C)	Nominal Wattage (at 25°C)								
Traffic Signal Module Type										
12" Red Ball	17	11								
8" Red Ball	13	8								
12" Red Arrow	12	9								
12" Green Ball	15	15								
8" Green Ball	12	12								
12" Green Arrow	11	11								
	Pedestrian Module Type									
Combination Walking Man/Hand	16	13								
Walking Man	12	9								
Orange Hand	16	13								

Table M-2

Standards for Signal Modules for Pedestrian Control Sold or Offered for Sale in the State of California

Appliance	Maximum Wattage (at 74°C)	Nominal Wattage (at 25°C)
Hand or 'Don't Walk' Sign or Countdown	12	10
Walking Person or 'Walk' Sign	12	9

ITE & Caltrans Approved LED Arrows



Features & Benefits

- Allows for mounting in any orientation in the signal head
- Industry's lowest power for all colors
- Meets or exceeds ITE intensity, color & uniformity specifications
- Temperature compensated power supplies for longer LED life
- Uniform appearance
- Transient suppression exceeds ITE and NEMA specifications (Up to 6KV ring wave)
- Manufactured with anti-capillary wires
- Conformal coated power supply
- Secondary lens treatment for abrasion resistance
- ITE products are Intertek/ETL certified and listed on ETL certification program website
- All units operate at 80 135V AC RMS, 60+/-3Hz

Part Number	Color	Lens Type	Dominant Wavelength (nm)	Typical Wattage at 25°C	Peak Minimum Maintained Luminous Intensity (cd)	Compliance
432-1314-001XOD	Red	Tinted	628	6	56.8	ITE, Omnidirectional
432-1374-001XOD	Red	Clear	628	6	56.8	ITE, Omnidirectional
431-3334-901XOD	Yellow	Tinted	590	7	141.6	ITE, Omnidirectional
431-3374-901XOD	Yellow	Clear	590	7	141.6	ITE, Omnidirectional
432-2324-001XOD	Green	Tinted	500	6	73.9	ITE, Omnidirectional
432-2374-001XOD	Green	Clear	500	6	73.9	ITE, Omnidirectional
432-1314-001	Red	Tinted	628	6	5,500 cd/m ²	Caltrans
431-3334-001	Yellow	Tinted	590	8	11,000 cd/m ²	Caltrans
432-2374-001	Green	Clear	500	7	11,000 cd/m ²	Caltrans





Traffic

ITE & Caltrans Approved Uniform Appearance LED Traffic Signal Modules



Features & Benefits

- Industry's lowest power for all colors
- Meets or exceeds ITE intensity, color & uniformity specification
- Temperature compensated power supplies for longer LED life
- Uniform appearance
- Expanded view radiation pattern suitable for span wire and steep grade applications
- Manufactured with anti-capillary wires
- Conformal coated power supply
- Secondary lens treatment for abrasion resistance
- Patent No. 7,281,818 and other patents pending
- ITE products are Intertek/ETL certified and listed on ETL certification program website
- All units operate at 80 135V AC RMS, 60+/-3Hz

Part Number	Color	Lens Type	Dominant Wavelength (nm)	Typical Wattage at 25°C	Peak Minimum Maintained Luminous Intensity (cd)	Size (in)	Compliance
433-1110-003XL	Red	Tinted	625	7	165	8	ITE
433-1170-003XL	Red	Clear	625	7	165	8	ITE
433-3130-901XL	Yellow	Tinted	590	8	410	8	ITE
433-3170-901XL	Yellow	Clear	590	8	410	8	ITE
433-2120-001XL	Green	Tinted	500	7	215	8	ITE
433-2170-001XL	Green	Clear	500	7	215	8	ITE
433-1110-003	Red	Tinted	625	6	133	8	Caltrans
433-3130-001	Yellow	Tinted	590	9	267	8	Caltrans
433-3170-001	Yellow	Clear	590	9	267	8	Caltrans
433-2120-001	Green	Tinted	500	7	267	8	Caltrans
433-2170-001	Green	Clear	500	7	267	8	Caltrans
433-1210-003XL	Red	Tinted	625	7	365	12	ITE
433-1270-003XL	Red	Clear	625	7	365	12	ITE
433-3230-901XL	Yellow	Tinted	590	9	910	12	ITE
433-3270-901XL	Yellow	Clear	590	9	910	12	ITE
433-2220-001XL	Green	Tinted	500	8	475	12	ITE
433-2270-001XL	Green	Clear	500	8	475	12	ITE
433-1210-003	Red	Tinted	625	6	339	12	Caltrans
433-3230-001	Yellow	Tinted	590	12	678	12	Caltrans
433-3270-001	Yellow	Clear	590	12	678	12	Caltrans
433-2220-001	Green	Tinted	500	9	678	12	Caltrans
433-2270-001	Green	Clear	500	9	678	12	Caltrans

Caltrans Approved Programmable Visibility LED Signal Modules



Features & Benefits

- Direct replacement for incandescent lamps in Programmable Visibility (PV) Signals
- Compatible with McCain and 3M signal heads
- 90% reduction in power vs. incandescent lamps
- Sealed lamps are moisture and dust resistant
- Fuse and transient suppressor incorporated for line and load protection
- Conformal coated power supply
- All units operate at 80-135V AC RMS, 60+/-3Hz

Part Number	Color	Lens Type	Dominant Wavelength (nm)	Typical Wattage at 25°C	Peak Minimum Maintained Luminous Intensity (cd)	Compliance
P46-3R33-003	Red	Clear	625	10	314 cd/m ²	Caltrans
P46-3Y33-003	Yellow	Clear	590	15	314 cd/m ²	Caltrans
P46-3B33-003	Green	Clear	500	8	314 cd/m ²	Caltrans



Traffic

ITE & Caltrans Uniform Appearance Hand & Person Pedestrian Signals



- Meets or exceeds ITE uniformity ration of not more than 1 to 5 between the max and min luminance value as measured (.5") dia spots
- Manufactured with anti-capillary wires
- Conformal coated power supply
- Fuse and transient suppressor incorporated for superior line and load protection
- Independent dedicated power supplies for added safety and reliability
- ITE products are Intertek/ETL certified and listed on ETL certification program website
- Transient suppression exceeds ITE and NEMA specifications (Up to 6KV ring wave)
- All units operate at 80-135VAC RMS, 60+/-3Hz

Part Number	Part Number Size	Description	Typical Wattage at 25°C		Min. Lumina	ance (cd/m2)	Compliance
			Hand	Person	Hand	Person	
430-6450-001X	16 x 18	Side-by-side Hand and Person	9	7	1,400	2,200	ΠΈ
430-6472-001X	16 x 18	Overlay Hand and Person	11	7	1,400	2,200	ΠE
430-5770-001X	12 x 12	Hand Only	8	N/A	1,400	N/A	ITE
430-7771-001X	12 x 12	Person Only	N/A	6	N/A	2,200	ITE
430-6772-001X	12 x 12	Overlay Hand and Person	8	10	1,400	2,200	ΠE
430-6450-001XC	16 x 18	Caltrans Side-by-Side	8	6	3,750	5,300	Caltrans
430-6473-001	16 x 18	Caltrans Side-by-Side	8	7	3,750	5,300	Caltrans

Uniform Appearance Countdown Pedestrian Signals



Features & Benefits

- MUTCD compliant for countdown applications
- Full preemption compatibility
- Up to 8 units can be connected in parrallel without affecting the monitoring of the Hand/Person
- Manufactured with anti-capillary wires
- Three (3) independent dedicated power supplies for added safety and reliability
- ITE products are Intertek/ETL certified and listed on ETL certification program
- Conformal coated power supply
- New imporved one piece housing design
- Improved optical design to provide superior uniform appearance of the icons
- Transient suppression exceeds ITE and NEMA specifications (Up to 6KV ring wave)
- All units operate at 80-135V AC RMS, 60+/-3Hz

Part Number	Housing Size	Symbol Color			ol Color Typical Wattage at 25°C			Min. Luminance (cd/m2)			Compliance
		Countdown	Hand	Person	Countdown	Hand	Person	Countdown	Hand	Person	
430-6479-001X	16 x 18	Portland Orange	Portland Orange	Lunar White	8	11	10	1,400	1,400	2,200	ΠE
430-6479-001XC	16 x 18	Portland Orange	Portland Orange	Lunar White	8	12	9	3,750	3,750	5,300	Caltrans

