



STATE OF LOUISIANA

Competitive Contract

Vendor: 310002233
Company
LEOTEK ELECTRONICS USA LLC
1955 LUNDY AVE
SAN JOSE CA 95131
Phone : 408-380-1788
Fax : 408-518-8128

T Number:
Version: C2
LAPS Contract: No
Fiscal Year: 2013
Min.Ord.Value: 0.00
Distributor Contract: No
PCard:No
Co-op Agreement:Yes

Contract number: 4400003812
Description: DOTD Contract - LED Modules

Buyer Information
Name: JENNIFER FONTENOT
Tel Number: 225-379-1441
Email: jennifer.fontenot@la.gov

SEBD Vendor: No
SEHI Vendor: No
VSE Vendor: No
DVSE Vendor: No
Contract Valid Dates:
02/21/2013 - 02/20/2016

Ship To Address

DOTD STWD CENTRAL WAREHOUSE
7686 TOM DR
BATON ROUGE, LA 70806

Supplier Text: This is not an order. This is the second and final renewal of the above referenced contract to furnish LED Modules per TCS 42, Revised 11/9/12 for the twelve (12) month period beginning February 21, 2015 through February 20, 2016 at the same prices, terms, and conditions of the original contract. The original contract began February 21, 2013 and ended February 20, 2014. The first renewal began February 21, 2014 and ended February 20, 2015.

Contract not to exceed thirty-six (36) months.

Attached is a copy of TCS 42, Revised 11/9/12 and TOAPL 1, Revised 10/10/12.

The Department of Transportation and Development reserves the right to cancel this contract with thirty (30) days written notice.

The quantities listed below are estimated usage only. No quantities are guaranteed. Only actual quantities needed will be ordered by DOTD. In the event a greater or lesser quantity is needed, the right is reserved by DOTD to increase or decrease the amount at the unit price stated in the bid.

Estimated Annual Usage:

Item 1: 4000
Item 2: 4000
Item 3: 4000
Item 4: 800
Item 5: 800
Item 6: 800

Recommending Approval:

Approved by:



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Products are subject to laboratory testing before final acceptance.

DELIVERY ARO: 30-45 Days

DELIVERY INSTRUCTIONS:

Must be delivered securely bound on pallets. Pallets charges not allowed. Pallet charges to be included in unit price.

Deliveries accepted Monday through Friday, 7:00 AM - 3:30 PM except for holidays, weekends or times of disaster.

Vendor must call (225) 935-0179 or (225) 935-0170 at least twenty-four (24) hours prior to delivery.

Notice to Vendor:

Line	Material No. Supplier Part No.	Description	Prod. Cat.	UOM	Net Price	Discount
1	10914 Leotek / TSL-12R-LX- IL6-A1-P2- CLR	SIGNAL,LED MODULE,12 IN,RED TCS NO. 42, REV 11/9/2012	46161500	EA	22.00000	
2	10915 Leotek / TSL-12Y-LX- IL6-A1-P2- CLR	SIGNAL,LED MODULE,12 IN YELLOW TCS NO. 42, REV 11/9/2012	46161500	EA	24.50000	
3	10916 TSL-12G-LX- IL6-A1-P2- CLR	SIGNAL,LED MODULE,12 IN GREEN TCS NO. 42, REV 11/9/2012	46161500	EA	23.40000	
4	10917 Leotek / TSL-12YA- IL6-A1-CLR	SIGNAL,LED MODULE,12 IN YELLOW ARROW TCS NO. 42, REV 11/9/2012	46161500	EA	25.25000	
5	10918 Leotek / TSL-12GA- IL6-A1-CLR	SIGNAL,LED MODULE,12 IN GREEN ARROW ARROW TCS NO. 42, REV 11/9/2012	46161500	EA	24.00000	
6	50570	SIGNAL,LED MODULE, 12 IN RED ARROW	46161500	EA	24.00000	

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Line	Material No. ----- Supplier Part No.	Description	Prod. Cat.	UOM	Net Price	Discount
	Leotek / TSL-12RA- IL6-A1-CLR	TCS NO. 42, REV 11/9/2012				

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Standard Terms and Conditions

1. THIS IS NOT AN ORDER TO SHIP (OR BEGIN SERVICE). A CONTRACT RELEASE OR PURCHASE ORDER MUST BE ISSUED BEFORE YOU ARE AUTHORIZED TO SHIP (OR BEGIN SERVICE).
2. THIS IS NOTICE THAT THE CONTRACT REFERENCED ABOVE HAS BEEN AWARDED TO YOU BASED ON THE BID (OR PROPOSAL) SUBMITTED. ALL TERMS, CONDITIONS, AND SPECIFICATIONS OF THE SOLICITATION WILL APPLY TO ALL ORDERS.
3. ANY AGENCY AUTHORIZED TO PURCHASE FROM THIS CONTRACT MUST ISSUE AN ORDER AND REFERENCE THE CONTRACT NUMBER, LINE NUMBER AND COMMODITY ITEM NUMBER FOR EACH ITEM.
4. CHANGES IN ITEMS TO BE FURNISHED ARE NOT PERMITTED (UNLESS APPROVED BY THE ISSUING AGENCY PRIOR TO DELIVERY). PRIOR APPROVAL MUST ALSO BE OBTAINED BEFORE DISTRIBUTORS CAN BE ADDED OR DELETED.
5. IF A DISTRIBUTOR LIST WAS SUBMITTED, CONTRACTOR MUST SEND COPIES OF THIS AWARD TO EACH DISTRIBUTOR.
6. QUANTITIES LISTED ARE ESTIMATED AND NO QUANTITIES ARE GUARANTEED (UNLESS "COMMITTED VOLUME" IS SPECIFICALLY STATED). CONTRACTOR MUST SUPPLY ACTUAL REQUIREMENTS ORDERED AT THE CONTRACT PRICE AWARDED.
7. COMPLIANCE WITH CIVIL RIGHTS LAWS.

THE CONTRACTOR AGREES TO ABIDE BY THE REQUIREMENTS OF THE FOLLOWING AS APPLICABLE: TITLE IV AND TITLE VII OF THE CIVIL RIGHTS ACT OF 1964, AS AMENDED BY THE EQUAL OPPORTUNITY ACT OF 1972, FEDERAL EXECUTIVE ORDER 11246, THE FEDERAL REHABILITATION ACT OF 1973, AS AMENDED, THE VIETNAM ERA VETERAN'S READJUSTMENT ASSISTANCE ACT OF 1974, TITLE IX OF THE EDUCATION AMENDMENTS OF 1972, THE AGE ACT OF 1975, AND CONTRACTOR AGREES TO ABIDE BY THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT OF 1990. CONTRACTOR AGREES TO NOT TO DISCRIMINATE IN ITS EMPLOYMENT PRACTICES, AND WILL RENDER SERVICES UNDER THIS AGREEMENT AND ANY CONTRACT ENTERED INTO AS A RESULT OF THIS AGREEMENT, WITHOUT REGARD TO RACE, COLOR, RELIGION, SEX, NATIONAL ORIGIN, VETERAN STATUS, POLITICAL AFFILIATION, OR DISABILITIES. ANY ACT OF DISCRIMINATION COMMITTED BY CONTRACTOR OR FAILURE TO COMPLY WITH THESE STATUTORY OBLIGATIONS WHEN APPLICABLE SHALL BE GROUNDS FOR TERMINATION OF THIS AGREEMENT AND ANY CONTRACT ENTERED INTO AS A RESULT OF THIS AGREEMENT.



Louisiana
Department of Transportation
And
Development

Traffic Control Standard
Number 42

12 INCH (300mm) LED Traffic Signal Lamp Unit



11/9/2012

Revised November 9, 2012



1. SCOPE

Red Modules (SAP# 10914, Stock# 14-03-4000):

12-in Red L.E.D. Signals

Yellow Modules (SAP# 10915, Stock# 14-03-4005):

12-in Yellow L.E.D. Signals

Green Modules (SAP# 10916, Stock# 14-03-4010):

12-in Green L.E.D. Signals

Red Arrow Modules (SAP# 50570, Stock# 14-03-4015):

12-in Red Arrow L.E.D. Signals

Yellow Arrow Modules (SAP# 10917, Stock# 14-03-4020):

12-in Yellow Arrow L.E.D. Signals

Green Arrow Modules (SAP# 10918, Stock# 14-03-4025):

12-in Green Arrow L.E.D. Signals

- 1.1. This specification describes the minimum acceptable design and performance requirements for 12 inch (300 mm) light emitting diode (LED) circular and arrow traffic signal lamp units for span wire and mast arm applications.
- 1.2. Modules must be preapproved on the Traffic Operations Approved Product List

2. 12 INCH (300 mm) LED TRAFFIC SIGNAL LAMP UNIT

2.1. General

- 2.1.1. All LED traffic signal lamp units shall conform to the latest versions of the Institute of Transportation Engineers (I.T.E.) Vehicle Traffic Control Signal Heads (VTCShs) LED Vehicle Arrow Traffic Signal Supplement standard, the I.T.E. VTCShs LED Circular Signal Supplement standard, and this specification. In the case of conflicts between standards and specifications, the latest Louisiana Department of Transportation and Development (LADOTD) specifications shall govern.
- 2.1.2. The LED traffic signal lamp unit shall be designed as a retrofit replacement for existing signal lamps which will fit into existing traffic signal housings without modification and not require any special tools for installation.
- 2.1.3. Installation of a retrofit replacement LED traffic signal lamp unit into existing signal housing shall only require removal of the existing lens, reflector, and incandescent lamp, fitting of the new unit securely in the housing door, and connecting to existing electrical wiring or terminal block by means of simple connectors.
- 2.1.4. If proper orientation of the LED traffic signal lamp unit is required for optimum performance, prominent and permanent directional marking(s), such as an "UP arrow" or equivalent, for correct indexing and orientation shall exist on the unit.

- 2.1.5. The manufacturer's name, model number, serial number, and manufacture date (minimum month and year) batch number and that the module has been tested by the manufacturer shall be permanently marked on the backside of the LED traffic signal lamp unit. A label shall be placed on the unit certifying compliance to the latest I.T.E. VTCSHs LED Vehicle Arrow Traffic Signal Supplement or latest I.T.E. VTCSHs LED Circular Signal Supplemental standards, including standard title and date.

2.2. Physical and Mechanical Requirements

- 2.2.1. The LED traffic signal lamp unit shall be a single, self-contained device, not requiring on-site assembly for installation into existing traffic signal housing.
- 2.2.2. The assembly and manufacturing process for the LED traffic signal lamp unit shall be such as to ensure all internal LEDs and electronic components are supported to withstand mechanical shock and vibration from high winds and other sources.
- 2.2.3. Each LED traffic signal lamp unit shall be comprised of a UV stabilized polymeric outer shell, multiple LED light sources, and a regulated power supply. LEDs are to be mounted on a polycarbonate positioning plate or PC board.
- 2.2.4. Each LED traffic signal lamp unit shall have a clear lens with the incandescent look (individual LEDs should not be directly visible). Tinted lenses are not acceptable.

2.3. Optical and Light Output Requirements

- 2.3.1. The LEDs shall be manufactured using Aluminum-Indium-Gallium-Phosphide (AlInGaP) technology or other LEDs with lower susceptibility to temperature degradation than Aluminum-Gallium-Arsenic (AlGaS). AlGaS LEDs will not be allowed.
- 2.3.2. Designs which require LEDs to be operated at currents greater than the LED manufacturer's recommended drive current will not be allowed.
- 2.3.3. The color of the LED traffic signal lamp units shall be specified in the solicitation.
- 2.3.4. Each LED traffic signal lamp unit shall meet minimum laboratory light intensity values and light output distribution as described in I.T.E. VTCSHs LED Supplements for a minimum period of sixty (60) months, based on normal use in traffic signal operation over an operating temperature range of -40° C to +74° C.
- 2.3.5. Measured chromaticity coordinates of LED traffic signal lamp units shall conform to the chromaticity requirements detailed in the latest edition of the I.T.E. VTCSHs LED Circular Signal Supplement or the latest edition of the I.T.E. VTCSHs LED

Vehicle Arrow Traffic Signal Supplement for circular or arrow indications respectively for a minimum period of sixty (60) months.

2.4. Electrical

- 2.4.1. Each LED traffic signal lamp unit shall incorporate a regulated power supply engineered to electrically protect the LEDs and maintain a safe and reliable operation. The power supply shall provide capacitor filtered DC regulated current to the LEDs per the LED manufacturer specification. Design of the power supply shall be such that the failure of an individual component, or any combination of components, cannot cause the signal to be illuminated after AC power is removed.
- 2.4.2. LED traffic signal lamp units shall be operationally compatible with TS1, TS2, and 2070 controllers, conflict monitors with plus features, and malfunction management units currently used by the LADOTD.
- 2.4.3. Circular and arrow LED traffic signal lamp units shall be designed to sense a loss of light output due to catastrophic LED failure and react in compliance with the failed state impedance provision of the I.T.E. VTCSHs Circular Signal Supplement (latest edition).
- 2.4.4. Two, captive, color coded, 600V 18 AWG minimum jacketed wires, 3 feet (1 m) long, conforming to the National Electric Code, rated for service at 105° C, are to be provided for an electrical connection.
- 2.4.5. The LED traffic signal lamp units shall have on-board circuitry, including voltage surge protection, to withstand high-repetition noise transients and low-repetition high-energy transients as stated in Section 2.1.8, NEMA Standard TS 2-2003, except voltage shall be 2000V instead of 1000V. The circuitry shall also be able to withstand high-repetition low-energy transients as stated in Section 2.1.6, NEMA Standard TS 2-2003.

2.5. Environmental Requirements

- 2.5.1. Environmental requirements shall meet or exceed I.T.E. VTCSHs LED Standard Supplements (latest edition).

2.6. Production Testing Requirements

- 2.6.1. A quality assurance (QA) program must be in place at the manufacturer's facility to ensure product reliability in accordance with I.T.E. VTCSHs LED Standard Supplements (latest edition).
- 2.6.2. The manufacturer shall energize each new LED traffic signal lamp unit for a minimum of 24 hours at nominal operating voltage (120V AC RMS) at room temperature to check for any electronic infant mortality to occur, and to ensure

electronic component reliability prior to shipment. Test results of a module may be required from the manufacturer at any time.

State of Louisiana
Department of Transportation and Development

PRODUCT	SOURCE
433-1270-003XL 12" Red LED Ball Clear Lens 433-3270-901XL 12" Yellow LED Ball Clear Lens 433-2270-001XL 12" Green LED Ball Clear Lens 431-3374-901XOD 12" Yellow Omni-Directional Arrow 432-2374-001XOD 12" Green Omni-Directional Arrow 432-1374-001XOD 12" Red Omni-Directional Arrow	Dialight Corporation <i>Manufacturing Location:</i> Dialight de Mexico s. de R.L., de C.V. Ensenada, B.C. Mexico 22830 <i>Corporate Address:</i> 1501 State Route 34 South Farmingdale, NJ 07727 <i>SMM: APS00010810</i>
12" LED Green Circular Signal Module 12" LED Green Arrow Signal Module 12" LED Red Circular Signal Module 12" LED Red Arrow Signal Module 12" LED Yellow Circular Signal Module 12" LED Yellow Arrow Signal Module	Excellence Opto, Inc. 1400 W. Lambert Road Suite B Brea, CA 92821 <i>SMM: APS00010770</i>
DR6-RCFB-17A 12" Red Ball LED DR6-RCFB-77A 12" Red Ball LED DR6-YCFB-17A-YX1 12" Yellow Ball LED DR6-YCFB-77A 12" Yellow Ball LED DR6-GCFB-17A 12" Green Ball LED DR6-GCFB-77A 12" Green Ball LED DR6-YCAAN-17A-YX 12" Yellow Arrow LED DR6-YCAAN-17A Yellow Arrow LED DR6-GCAAN-17A 12" Green Arrow LED	GE Lumination <i>Manufacturing Location:</i> 7.5 km Carretera Presa de la Amistad 26200 Acuna, COAH, MX <i>Corporate Address:</i> 6180 Halle Drive Valley View, OH 44125 <i>SMM: APS00010890</i>
DURALIGHT JXC-300HFR-C 12" Red Ball LED DURALIGHT JXC-300HFY-C 12" Yellow Ball LED DURALIGHT JXC-300HFG-C 12" Green Ball LED DURALIGHT JXJ300-07R03 12" Red Arrow LED DURALIGHT JXJ300-07Y03 12" Yellow Arrow LED DURALIGHT JXJ300-07G03 12" Green Arrow LED	TraStar, Inc. 860 N. Dorothy Drive Suite 600 Richardson, TX 75081-2770 <i>SMM: APS00010980</i>

TSL-12R-LX-IL6-A1-P2-CLR 12" Red Ball LED TSL-12Y-LX-IL6-A1-P2-CLR 12" Yellow Ball LED TSL-12G-LX-IL6-A1-P2-CLR 12" Green Ball LED TSL-12RA-IL6-A1-CLR 12" Red Arrow LED TSL-12YA-IL6-A1-CLR 12" Yellow Arrow LED TSL-12GA-IL6-A1-CLR 12" Green Arrow LED	Leotek Electronics USA Corp. 1330 Memorex Drive Santa Clara, CA 95050 <i>SMM: APS00010780</i>
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REFERENCE:

LED - Louisiana DOTD Traffic Control Standard Number 42 (TCS No. 42)

NOTE:

All material, regardless of prior approval, shall be sampled in accordance with the Materials Sampling Manual and tested for conformance to the original specification. Any product may be removed from the Traffic Operations Approved Product List should any problem develop concerning formulation, color, application or performance.

