



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: 1
LAPS Contract: No
Fiscal Year: 2016
Min.Ord.Value: 0.00
Distributor Contract: No
PCard:No
Co-op Agreement:Yes

Contract number: 4400008720
Description: DOTD Contract-LED Modules

Buyer Information
Name: JULIE KENNISON
Tel Number: 225-379-1424
Email: julie.kennison@la.gov

SEBD Vendor: No
SEHI Vendor: No
VSE Vendor: No
DVSE Vendor: No
Contract Valid Dates:
02/26/2016 - 02/25/2017

Supplier Text: Annual contract to furnish LED Modules for a period of twelve (12) months beginning 02/26/16-02/25/17. Attached is a copy of TCS 42 Specifications, Revised 11/9/12 and TOAPL 1, Revised 1/8/16.

At the option of the Department of Transportation and Development and acceptance by the contractor, this contract may be extended for two (2) additional twelve (12) month periods at the same terms, prices and conditions. Contract not to exceed thirty-six (36) months.

Prior to exercising the department's option to extend the contract, the department will determine if an extension is in the best interest of the department, taking into consideration current market trends, cost factors, price comparison with similar service in other states and various other factors as determined by the DOTD procurement director.

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

DELIVERY ARO: 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.

Recommending Approval:

Approved by:

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PAYMENT:

In an effort to increase efficiencies and effectiveness as well as be strategic in utilizing technology and resources, DOTD strongly encourages vendors to participate in accepting Electronic Funds Transfer (EFT) payments.

EFT payments are sent from the State's bank directly to the payee's bank each weekday. The only requirement is that you have an active checking or savings account at a financial institution that can accept Automated Clearing House (ACH) credit files and remittance information electronically. Additional information is available at <http://www.doa.louisiana.gov/OSRAP/EFTforWebsite.pdf>

Notice to Vendor:

Line	Material No. ----- Supplier Part No.	Description	Prod. Cat.	UOM	Net Price	Discount
1	10914	SIGNAL,LED MODULE,12 IN,RED TCS NO. 42, REV 11/9/2012 TOAPL 1 PRODUCT SOURCE CODE 1E7	46161500	EA	20.50000	
2	10915	SIGNAL,LED MODULE,12 IN YELLOW TCS NO. 42, REV 11/9/2012 TOAPL 1 PRODUCT SOURCE CODE 1E8	46161500	EA	22.10000	
3	10916	SIGNAL,LED MODULE,12 IN GREEN TCS NO. 42, REV 11/9/2012 TOAPL 1 PRODUCT SOURCE CODE 1E9	46161500	EA	21.85000	
4	10917	SIGNAL,LED MODULE,12 IN YELLOW ARROW TCS NO. 42, REV 11/9/2012 TOAPL 1 PRODUCT SOURCE CODE 1E11	46161500	EA	24.00000	
5	10918	SIGNAL,LED MODULE,12 IN GREEN ARROW TCS NO. 42, REV 11/9/2012 TOAPL 1 PRODUCT SOURCE CODE 1E12	46161500	EA	23.00000	
6	50570	SIGNAL,LED MODULE, 12 IN RED ARROW TCS NO. 42, REV 11/9/2012	46161500	EA	22.15000	

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Line	Material No. ----- Supplier Part No.	Description	Prod. Cat.	UOM	Net Price	Discount
		TOAPL 1 PRODUCT SOURCE CODE 1E10				

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 CODE	PRODUCT	SOURCE
1A1	433-1270-003XL, 12" Red LED Ball Clear Lens	Dialight Corporation 1501 State Route 34 South Farmingdale, NJ 07727 SMM: APS00010810
1A2	433-1270-003XL 15, 12" Red LED Ball Clear Lens	
1A3	433-3270-901XL, 12" Yellow LED Ball Clear Lens	
1A4	433-2270-001XL 15, 12" Yellow LED Ball Clear Lens	
1A5	433-2270-001XL, 12" Green LED Ball Clear Lens	
1A6	433-3270-901XL 15, 12" Green LED Ball Clear Lens	
1A7	432-1374-001XOD15, 12" Red LED Omni-Directional Arrow	
1A8	432-3374-901XOD15, 12" Yellow LED Omni-Directional Arrow	
1A9	432-2374-001XOD15, 12" Green LED Omni-Directional Arrow	
1A10	432-1374-001XOD, 12" Red Omni-Directional Arrow	
1A11	431-3374-901XOD, 12" Yellow Omni-Directional Arrow	
1A12	432-2374-001XOD, 12" Green Omni-Directional Arrow	
1B1	TRV-G12SG-D2T-C, 12" Green LED Ball Clear Lens	Excellence Opto. Inc. 1663 West 2nd Street Pomona, CA 91766 Office: 909-784-3333 Fax:909-784-3330 SMM: APS00010770
1B2	TRA-G12DG-IN-C, 12" LED Green Omni-Directional Arrow	
1B3	TRV-R12SG-D2T-C, 12" Red LED Ball Clear Lens	
1B4	TRA-R12DG-IN-C, 12' LED Red Omni-Directional Arrow	
1B5	TRV-Y12SG-D1T-C, 12" Yellow LED Ball Clear Lens	
1B6	TRA-Y12DG-IN2-C12" LED Yellow Omni-Directional Arrow	
1C2	DR6-RCFB-77A; 12" Red Ball LED	GE Lighting Solutions 1975 Noble Road East Cleveland, OH 44112 SMM: APS00010890
1C4	DR6-YCFB-77A; 12" Yellow Ball LED	
1C6	DR6-GCFB-77A 12" Green Ball LED	
1C7	DR6-YCAAN-17A-YX; 12" Yellow Arrow LED	
1C8	DR6-YCAAN-17A; Yellow Arrow LED	
1C9	DR6-GCAAN-17A; 12" Green Arrow LED	
1C10	DR6-RCFB-VLA; Red Ball LED	
1C11	DR6-YCFB-VLA; Yellow Ball LED	
1C12	DR6-GCFB-VLA; Green Ball LED	
1C13	DR6-RCAAN-17A; 12" Red Arrow LED	

1D1	DURALIGHT JXC-300HFR-C 12" Red Ball LED	TraStar, Inc. 860 N. Dorothy Drive Suite 600 Richardson, TX 75081-2770 SMM: AFS00010980
1D2	DURALIGHT JXC-300HFY-C 12" Yellow Ball LED	
1D3	DURALIGHT JXC-300HFG-C 12" Green Ball LED	
1D4	DURALIGHT JXJ300-07R03 12" Red Arrow LED	
1D5	DURALIGHT JXJ300-07Y03 12" Yellow Arrow LED	
1D6	DURALIGHT JXJ300-07G03 12" Green Arrow LED	
1E1	TSL-12R-LX-IL6-A1-P2-CLR 12" Red Ball LED	Leotek Electronics USA Corp. 726 S. Hillview Dr Milpitas, CA 95035 SMM: AFS00010780
1E2	TSL-12Y-LX-IL6-A1-P2-CLR 12" Yellow Ball LED	
1E3	TSL-12G-LX-IL6-A1-P2-CLR 12" Green Ball LED	
1E4	TSL-12RA-IL6-A1-CLR 12" Red Arrow LED	
1E5	TSL-12YA-IL6-A1-CLR 12" Yellow Arrow LED	
1E6	TSL-12GA-IL6-A1-CLR 12" Green Arrow LED	
1E7	TSL-12R-LX-IL6-A1-P3-CLR 12" Red Ball LED	
1E8	TSL-12Y-LX-IL6-A1-P3-CLR 12" Yellow Ball LED	
1E9	TSL-12G-LX-IL6-A1-P3-CLR 12" Green Ball LED	
1E10	TSL-12RA-IL6-A1-P3-CLR 12" Red Arrow LED	
1E11	TSL-12YA-IL6-A1-P3-CLR 12" Yellow Arrow LED	
1E12	TSL-12GA-IL6-A1-P3-CLR 12" Green Arrow LED	

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.