



Traffic Signals

Material Producer List

Traffic Safety Division – Traffic Management Section

Traffic Signals

The following materials are pre-qualified for use with the Department's *Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges* and are associated with Department Material Specifications (DMS) referenced in Standard Specification Items 680, 681, 682, 685, and 690, which pertain to the installation of highway traffic signals.

Material Producer List (MPL) for DMS-11120, "VEHICLE SIGNAL HEADS"

The following products are pre-qualified for use on projects where vehicle signal heads are furnished or installed as required by the item descriptive code. Signal heads are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown. Where miscellaneous parts, brackets, hardware, nuts, bolts, washers, or other incidentals are necessary and are not shown as pre-qualified products, the contractor will furnish products that meet the requirements of the plans and specifications.

Vehicle Signal Housings

Manufacturer/Distributor	Model/Number
Chapel Hill Manufacturing	TPY series (12"/Polycarbonate/Yellow)
	TAY series (12"/Aluminum/Yellow)
Econolite	TPY series (12"/Polycarbonate/Yellow)
	TAY series (12"/Aluminum/Yellow)
General Traffic Equipment Corp. (GTE)	T30H-Poly-TxDOT (Polycarbonate/3-section)
	T40H-Poly-TxDOT (Polycarbonate/4-section)
	T50H-Poly-TxDOT (Polycarbonate/5-section)
	T30H-Poly-TxDOT (Aluminum/3-section)
	T40H-Poly-TxDOT (Aluminum/4-section)
	T50H-Poly-TxDOT (Aluminum/5-section)
McCain	MTSTP series (Polycarbonate)
	MTSTA series (Aluminum)
	PT5X-XXXXXXX-TX (Polycarbonate/5-Section)
	AT3X-XXXXXXX-TX (Aluminum/3-Section)
	AT4X-XXXXXXX-TX (Aluminum/4-Section)
	AT5X-XXXXXXX-TX (Aluminum/5-Section)
Mobotrex Distribution (formerly Brown Traffic)	SA series (Polycarbonate w/Internal Hinges)
	SG series (Polycarbonate or Aluminum w/external hinges)

Vehicle Signal Housings

Manufacturer/Distributor	Model/Number
North American Signals	PT3X-XXXXXXX-TX (Polycarbonate/3-Section)
	PT4X-XXXXXXX-TX (Polycarbonate/4-Section)
	PT5X-XXXXXXX-TX (Polycarbonate/5-Section)
	AT3X-XXXXXXX-TX (Aluminum/3-Section)
	AT4X-XXXXXXX-TX (Aluminum/4-Section)
	AT5X-XXXXXXX-TX (Aluminum/5-Section)
Oriux (Peek Traffic Corp. DBA Oriux)	HSS Series (Aluminum)
	PSS Series (Polycarbonate)
Trafficware (Engineered by Naztec)	12004 series (Polycarbonate/Yellow)
	2007 series (Aluminum/Yellow)

*Material Producer List (MPL) for
DMS-11121, "TWELVE-INCH LED TRAFFIC SIGNAL LAMP UNIT"*

The following products are pre-qualified for use on the projects where 12 in. (300 mm) light emitting diode (LED) traffic signal lamps are furnished or installed as required by the item descriptive code. LED traffic signal lamp units are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

LED Modules

Manufacturer	Color/Type	Brand Name/Model Number
Dialight	Red Ball	433-1210-003XL (tinted)
		433-1210-003XL15 (tinted)
		433-1270-003XL (clear)
		433-1270-003XL15 (clear)
	Yellow Ball	433-3230-901XL (tinted)
		433-3230-901XL15 (tinted)
		433-3270-901XL (clear)
		433-3270-901XL15 (clear)
	Green Ball	433-2220-001XL (tinted)
		433-2220-001XL15 (tinted)
		433-2270-001XL (clear)
		433-2270-001XL15 (clear)
	Red Arrow	432-1314-001XODTE (tinted)
		432-1314-001XOD15 (tinted)
		432-1374-001XOD15 (clear)
	Yellow Arrow	431-3334-901XODTE (tinted)
		431-3334-901XOD15 (tinted)
		431-3374-901XOD15 (clear)
	Green Arrow	432-2324-001XODTE (tinted)
		432-2324-001XOD15 (tinted)
432-2374-001XOD15 (clear)		
Duralight/Trastar	Red Ball	JXC-300HFTR (tinted)
		JXC300-HFTR03 (tinted)
		JXC300-HFTR04 (tinted)
		JXC300-HFR-C (clear)
	Yellow Ball	JXC-300HFTY02 (tinted)
		JXC300-HFTY03 (tinted)
		JXC300-HFTY04 (tinted)
		JXC300-HFY-C (clear)

LED Modules

Manufacturer	Color/Type	Brand Name/Model Number
Duralight/Trastar	Green Ball	JXC-300HFTG (tinted)
		JXC300-HFTG03 (tinted)
		JXC300-HFTG04 (tinted)
		JXC300-HFG-C (clear)

LED Modules

Manufacturer	Color/Type	Brand Name/Model Number
Duralight/Trastar	Red Arrow	JXJ300-07R03 (clear)
		JXJ300-07R04 (clear)
	Yellow Arrow	JXJ300-07Y03 (clear)
		JXJ300-07Y04 (clear)
	Green Arrow	JXJ300-07G03 (clear)
		JXJ300-07G04 (clear)
Excellence Opto, Inc. (EOI)	Red Ball	TRV-R12SG-D2T (tinted)
	Yellow Ball	TRV-Y12SG-D1T (tinted)
	Green Ball	TRV-G12SG-D2T (tinted)
	Red Arrow	TRA-R12DG-IN (tinted)
	Yellow Arrow	TRA-Y12DG-IN2 (tinted)
	Green Arrow	TRA-G12DG-IN (tinted)
GE Lighting Solutions	Red Ball	DR6-RTFB-77A (tinted)
		DR6-RTFB-VLA-037 (tinted)
	Yellow Ball	DR6-YTFB-77A (tinted)
		DR6-YTFB-VLA-037 (tinted)
		DR6-YZFB-VLA-037 (tinted)
	Green Ball	DR6-GTFB-77A (tinted)
		DR6-GCFB-77A (clear)
		DR6-GCFB-VLA-037 (clear)
	Red Arrow	DR6-RTAAN-17A (tinted)
		DR6-RTAAN-VLA (tinted)
	Yellow Arrow	DR6-YTAAN-17A-YX (tinted)
		DR6-GTAAN-VLA (tinted)
	Green Arrow	DR6-GTAAN-VLA (tinted)
		DR6-GCAAN-17A (clear)

LED Modules

Manufacturer	Color/Type	Brand Name/Model Number
Leotek Electronics	Red Ball	TSL-12R-LX-IL6-A1-P2 (tinted)
		TSL-12R-LX-IL6-A1-P3 (tinted)
		TSL-12R-LX-IL6-A1-P2-CLR* (clear)
		TSL-12R-LX-IL6-A1-P3-CLR (clear)
	Yellow Ball	TSL-12Y-LX-IL6-A1-P2 (tinted)
		TSL-12Y-LX-IL6-A1-P3 (tinted)
		TSL-12Y-LX-IL6-A1-P2-CLR *(clear)
		TSL-12Y-LX-IL6-A1-P3-CLR (clear)
	Green Ball	TSL-12G-LX-IL6-A1-P2 (tinted)
		TSL-12G-LX-IL6-A1-P3 (tinted)
		TSL-12G-LX-IL6-A1-P2-CLR* (clear)
		TSL-12G-LX-IL6-A1-P3-CLR (clear)
	Red Arrow	TSL-12RA-IL6-A1 (tinted)
		TSL-12RA-IL-A1-P3 (tinted)
		TSL-12RA-IL6-A1-CLR (clear)
	Yellow Arrow	TSL-12YA-IL6-A1 (tinted)
		TSL-12YA-IL-A1-P3 (tinted)
		TSL-12YA-IL6-A1-CLR (clear)
		TSL-12YA-IL6-A1-P3-CLR (clear)
	Green Arrow	TSL-12GA-IL6-A1 (tinted)
TSL-12GA-IL-A1-P3 (tinted)		
TSL-12GA-IL6-A1-CLR (clear)		
TSL-12GA-IL6-A1-P3-CLR (clear)		

NOTE: For Leotek LED Modules marked with an asterisk (*), only modules with manufacture date codes of January 2013 or later are approved for use on Department projects.

MATERIAL PRODUCER LIST (MPL) FOR DMS-11130, "PEDESTRIAN SIGNAL HEADS"

The following products are pre-qualified for use on the projects where LED optical units for pedestrian signal heads are furnished or installed as required by the plans or item descriptive code. LED optical units for pedestrian signal heads are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

Pedestrian Signal Heads

Manufacturer/Distributor	Model/Number
Chapel Hill Manufacturing	6745 (Aluminum)
	7300 (Polycarbonate)
General Traffic Equipment Corp. (GTE)	P7-EMPTY-*SAM-*GV-TxDOT (Polycarbonate)
	P7-EMPTY-*PO-*GV-TxDOT (Polycarbonate)
	P8-EMPTY-*SAM-*GV-TxDOT (Aluminum)
	P8-EMPTY-*PO-*GV-TxDOT (Aluminum)
	*SAM = Swing Arm Mount (Clamshell) *GV = Grid Visor (Z-Crate) *PO = Ports Open (Unplugged)
McCain	MPA (Aluminum/Drilled/Standard)
	MPP (Polycarbonate/Drilled/Standard)
Mobotrex Distribution (formerly Brown Traffic)	SG7M (Aluminum/Polycarbonate)
	SG7S (Aluminum/Polycarbonate)
North American Signals	PP-XXXOZB-TX (Polycarbonate)
	AP-XXXOZB-TX (Aluminum)
Trafficware (Engineered by Naztec)	12053 (Aluminum/Yellow)
	12056 (Aluminum/Black)
Peek Traffic	4302A (Aluminum)
	4302P (Polycarbonate)

Symbolic LED Optical Units

Manufacturer/Distributor	Model/Number
Cooper Lighting Products	CLP18DFA
Dialight	4306472001
Duralight/Trastar	JXM-300VIA
	JXM-400VIA
GELcore	PS7-CFC1-01A
	PS7-CFC1-26A
Leotek Electronics	7300 (Polycarbonate)
Peek Traffic	LEDP-HMM-002

NOTE: The above Symbolic Pedestrian LED Modules (without an integrated countdown display) are not approved for traffic signals specified on Department projects let March 2013 and after.

**MATERIAL PRODUCER LIST (MPL) FOR
DMS-11131, "PEDESTRIAN LED COUNTDOWN SIGNAL MODULES"**

The following products are pre-qualified for use on projects where countdown Symbolic LED optical units for pedestrian signal heads are furnished or installed as required by the plans or item descriptive code. Countdown Pedestrian LED Signal Modules are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

Pedestrian LED Countdown Signal Modules

Manufacturer/Distributor	Model/Number
Dialight	430-6479-001XTE
Duralight/Trastar	JXM400VIEIL
	JXM-400VIEILO1
GE Lighting Solutions	PS7-CFF1-26A-FS
	PS7-CFF1-VLA-037
Leotek Electronics	TSL-PED-16-CIL-P1
	TSL-PED-16-SPC-V1

**MATERIAL PRODUCER LIST (MPL) FOR
DMS-11132, “ACCESSIBLE PEDESTRIAN SIGNALS”**

The following products are pre-qualified for use on projects where Accessible Pedestrian Signals are furnished or installed as required by the plans or item descriptive code. Accessible Pedestrian Signals are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

Accessible Pedestrian Signals

Manufacturer/Distributor	Model/Number
Campbell Company	<p>WiAAPS (Wireless Advisor Advanced Accessible Pedestrian Station) <u>Consists of the following:</u></p> <ul style="list-style-type: none"> • APB (Advanced Pedestrian Button) • APC (Advanced Pedestrian Coordinator) w/antenna • Termination Board <p><u>Software used:</u> Web Browser</p>
Pelco	<p>IntelliCross <u>Consists of the following:</u></p> <ul style="list-style-type: none"> • Push Button Station • PIM (Power Interface Module) • CIU-C (Communications Interface Unit) <p><u>Software used:</u> ICS (IntelliCross Configuration Software)</p> <p><u>Notes:</u> SP-1055-TX-x-x-Pxx</p>
Polaris Enterprises, LLC	<p>EN2 EZCOMM Navigator <u>Consists of the following:</u></p> <ul style="list-style-type: none"> • EN2 Push Button Station • CCU2EN Central Control Unit (Blue) • Interconnect Board (50 pin 4 cable harness) <p><u>Software used:</u> EZ APS Tool Box</p> <p><u>Notes:</u> Blue CCU2EN = 18VDC system between Control Unit and Push Buttons over the two button wires. Not Compatible with iN2 iNavigator or iNS2 iNavigator systems.</p> <p>(This product has been discontinued from manufacture, but this item will remain on MPL until a specified time is determined for it to be removed.)</p>

Accessible Pedestrian Signals

Manufacturer/Distributor	Model/Number
	<p>iN2 iNavigator</p> <p><u>Consists of the following:</u></p> <ul style="list-style-type: none"> • iN2 Push Button Station • iCCU-S (Intelligent Central Control Unit) (Red) • Interconnect Board (iN2-iCB) <p><u>Software used:</u> Intelligent Config Utility</p> <p><u>Notes:</u> Red iCCU-S = 24VDC system using PLC over the two button wires between Control Unit and Push Buttons. Includes SDLC & 50 Pin 4 cable harness. Can operate as a full BIU in TS2. Compatible with iNS2 push buttons.</p> <p>(This system is superseded by iNS2 System. The iCCU-S is no longer available. The iCCU-S2 is compatible with the iN2 push buttons).</p>
Polara Enterprises, LLC	<p>iNS2 iNavigator</p> <p><u>Consists of the following:</u></p> <ul style="list-style-type: none"> • iNS2 Push Button Station • iCCU-S2 (Intelligent Central Control Unit) (Red) • Interconnect Board (iN2-iCB) <p><u>Software used:</u> Intelligent Config Utility Polara Field Service iOS App</p> <p><u>Notes:</u> Red iCCU-S2 = 24VDC system using PLC over the two button wires between Control Unit and Push Buttons. Includes SDLC & separate cables. Can operate as a full BIU in TS2. Compatible with iN2 push buttons.</p> <p>Manufacturer sells an adapter cable, 50PINADP, that allows you to use the existing cabinet iN2 ped input and ped output wiring (50 pin 4 cable harness system) with the newer iNS2 iNavigator System that utilizes the iCCU-S2 with a separate cable wiring system.</p>
	<p>iDetect</p> <p><u>Consists of the following:</u></p> <ul style="list-style-type: none"> • iDS2 Push Button Station • iCCU-S2 (Intelligent Central Control Unit) (Red) • Interconnect Board (iN2-iCB) <p><u>Software used:</u> Intelligent Config Utility Polara Field Service iOS App</p> <p><u>Notes:</u> Red iCCU-S2 = 24VDC system using PLC over the two button wires between Control Unit and Push Buttons. Includes SDLC & separate cables. Can operate as a full BIU in TS2. Compatible with iNS2 push buttons.</p> <p>iDetect is a touchless actuation feature that only comes in an iNS push button station. It is an added feature to the iNS push button station. If ordered with iNS, it becomes "iDS" or as a 2-wire push button "iDS2".</p>

**MATERIAL PRODUCER LIST (MPL) FOR
DMS-11150, "SOLAR POWER FLASHER CONTROLLER ASSEMBLY"**

The following products are pre-qualified for use on the projects where solar power flasher controller assemblies are furnished or installed as required by the plans or item descriptive code. Solar power flasher controller assemblies are subject to testing.

24-Hour Flasher Assembly

Manufacturer	Model/Number	Type
BDesign	BD24-1R-Z1	Single Red Indication
	BD24-2R-Z1	Dual Red Indication
	BD24-1Y-Z1	Single Yellow Indication
	BD24-2Y-Z1	Dual Yellow Indication
	BD24-1R-Z2	Single Red Indication
	BD24-2R-Z2	Dual Red Indication
	BD24-1Y-Z2	Single Yellow Indication
	BD24-2Y-Z2	Dual Yellow Indication
Carmanah	R829-G	Dual Yellow Indication
Chapel Hill	SP24-TX1-1R	Single Red Indication
	SP24-TX1-2R	Dual Red Indication
	SP24-TX1-1Y	Single Yellow Indication
	SP24-TX1-2Y	Dual Yellow Indication
Consolidated Traffic Controls, Inc.	RTC SF24-TX1R	Advance Red Indication
	RTC SF24-TX2R	Advance Red Indication
	RTC SF24-TX1Y	Advance Yellow Indication
	RTC SF24-TX2Y	Advance Yellow Indication
Eltec	S890502	Single Yellow Indication
	S890503	Single Red Indication
	S890505	Dual Yellow Indication
	S890506	Dual Red Indication
	S890507	Dual Yellow Indication
	S890508	Dual Red Indication
Encom	Harmony	Dual Yellow Indication Dual Red Indication
Paradigm Traffic, Inc.	AI070-90W-15CAB	Dual Yellow Indication
RTC	TXDCSZ (1 Battery)	Dual Yellow Indication
	TXDC2BATT (2 Battery)	Dual Yellow Indication

24-Hour Flasher Assembly

Manufacturer	Model/Number	Type
Texas Highway Products (formerly ACM Highway Products)	SF24-1R-Z1	Single Red Indication
	SF24-1Y-Z1	Single Yellow Indication
	SF24-2R-Z1	Dual Red Indication
	SF24-2Y-Z1	Dual Yellow Indication
	SF24-1R-Z2	Single Red Indication
	SF24-1Y-Z2	Single Yellow Indication
	SF24-2R-Z2	Dual Red Indication
	SF24-2Y-Z2	Dual Yellow Indication
Traffic and Parking Control Company, Inc. (TAPCO)	600173 (Dual BlinkerBeacon)	Dual Yellow Indication
WE Manufacturing	TxDOT Solar Flasher	Dual Yellow Indication Dual Red Indication

School-Zone Flasher Assembly

Manufacturer	Model/Number	Type
BDesign	BDSZ-1Y-Z1	Single Beacon School-Zone
	BDSZ-2Y-Z1	Dual Beacon School-Zone
	BDSZ-1Y-Z2	Single Beacon School-Zone
	BDSZ-2Y-Z2	Dual Beacon School-Zone
Carmanah	R829-G	Dual Beacon Indication
Chapel Hill	SPSZ-TX1	School-Zone
Consolidated Traffic Controls Inc.	RTC SZF-TX1Y	School-Zone
	RTC SZF-TX2Y	School-Zone
Eltec	S890501	Single Beacon School-Zone
	S890504	Dual Beacon School-Zone
Encom	Harmony	Dual Yellow Indication
Paradigm Traffic, Inc.	A1070-90W-15CAB	Dual Yellow Indication
RTC	TXDCSZ (1 Battery)	Dual Yellow Indication
	TXDC2BATT (2 Battery)	Dual Yellow Indication
Texas Highway Products (formerly ACM Highway Products)	SFSZ-2Y-Z1	School-Zone
	SFSZ-2Y-Z2	School-Zone
Traffic and Parking Control Company, Inc. (TAPCO)	600173 (Dual BlinkerBeacon)	Dual Yellow Indication

Replacement Parts

Manufacturer	Model/Number	Type
Consolidated Traffic Controls Inc.	RTC 502598TxDOTF	Panel DC with Flasher & Regulator

**MATERIAL PRODUCER LIST (MPL) FOR
DMS-11160, "FLASHER CONTROLLER ASSEMBLY"**

The following products are pre-qualified for use on the projects where flasher controller assemblies are furnished or installed as required by the plans or item descriptive code. Flasher controller assemblies are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

Flasher Cabinets

Manufacturer/Distributor	Model/Number
B Designs	FB1-TX
Chapel Hill / Traffic Parts	2859
Henke Enterprises	NFF2C
Mobotrex Distribution (formerly Brown Traffic)	EPS217
RTC	RTCAC
TEC (Traffic Engineering Controls)	NF2C-TX
Trafficware (Engineered by Naztec)	50040-2000
WE Manufacturing	WE-MFG 120V AC Flasher

Time Clocks

Manufacturer/Distributor	Model/Number
ELTEC (Electrotechnics)	TC-18 <u>Software used to connect:</u> DLPRO 18
RTC	AP21T <u>Software used to connect:</u> trcomp
	AP22 <u>Software used to connect:</u> RTC Connect
Trafficware (Engineered by Naztec)	50075-2001 (Chronomax) <u>Software used to connect:</u> Chronomax Direct

**MATERIAL PRODUCER LIST (MPL) FOR
DMS-11170, "TRAFFIC SIGNAL CONTROLLER ASSEMBLY"**

The following products are pre-qualified for use on the projects where traffic signal controller assemblies are furnished or installed as required by the plans or item descriptive code. Traffic signal controller assemblies are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

CONTROLLER UNIT (ONLY)

NEMA, TS-2, Pole-Mount/Base-Mount (12 and 16 positions), SDLC Traffic Controller Assembly with ABC Connectors (Type 2) and without ABC Connectors (Type 1)

Manufacturer/Distributor	Model/Number	Type	*** Firmware Version
Econolite	Cobalt (Color Touch Screen)	Type 1 and 2	32.64.30 (ASC3app)**** 03.02.02 (EOSapp)
	Cobalt (Non-Touch Screen)	Type 1 and 2	32.64.30 (ASC3app)**** 03.02.02 (EOSapp)
Econolite ATMS Software	Centracs		2.3.3.22
	Centracs Local Edition (Standalone)		2.3.3.22
Intelight	X1*****	Type 1 and 2	1.9.16
	X1L (Lite)*****	Type 1 and 2	1.9.16
	X2 (Color Touch Screen)*****	Type 1 and 2	1.9.16
	X3	Type 1 and 2	2.1.6
	X3 (Color Touch Screen)	Type 1 and 2	2.1.6
	X3L (Lite)	Type 1 and 2	2.1.6
	XN-1	Type 1	2.1.6
Intelight ATMS Software	MaxView		1.9.0.745
McCain, Inc.	M57970 (ATCeX2)	Type 1	1.11.0
	M57390 (ATCeX2)	Type 2	1.11.0
McCain ATMS Software	Transparity		1.4
Peek Traffic Corporation	ATC 1000 Gen 1	Type 1 and 2	3.18
	ATC 1000 Gen 2	Type 1 and 2	3.18
Peek ATMS Software	Spinnaker		2.0.0
	ATC Link (Standalone)		3.25
Siemens	8130-0400-*** (M52)	Type 2	4.56c/3.56c*
	8130-1900-*** (M52)	Type 2	4.56c/3.56c*
	8130-0402-*** (M52)	Type 2	4.56c/3.56c*
	8130-0402-*** (M52 Master/Local)	Type 2	4.10/3.56c*
	8132-0000-*** (M60 NEMA Linux)**	Type 2	5.2.2
	8133-0000-*** (M60 ATC Lite)**	Type 2*	5.2.2
	8133-0004-*** (M60)**	Type 2*	5.2.2

CONTROLLER UNIT (ONLY)

NEMA, TS-2, Pole-Mount/Base-Mount (12 and 16 positions), SDLC Traffic Controller Assembly with ABC Connectors (Type 2) and without ABC Connectors (Type 1)

Manufacturer/Distributor	Model/Number	Type	*** Firmware Version
Siemens ATMS Software	Tactics		5.2.4
Trafficware (Engineered by Naztec)	50099-22300-1	980 Type 1	61.4u
	50099-20300-1	980 Type 2	61.4u
	50260-2001	ATC Type 1	76.15g
	50260-2011	ATC Type 2	76.15g
	50280-2140	980 ATC Type 1	76.15g
	50280-2240	980 ATC Type 2	76.15g
Trafficware ATMS Software	ATMS.Now		2.7
	Street Sync		1.5

*M52's with OS9. These controller models and versions will be removed from the MPL on December 22, 2021.

**Not compatible with Econolite Accuscan 600, 1000 and Smartmicro Type 32 radar systems when using SDLC. Use expansion module (contact closure) cards.

*** This denotes latest approved firmware by TRF-TM Branch.

**** This version of controller firmware will be removed from the MPL on August 31, 2021.

***** This version of controller firmware and model will be removed from the MPL on December 22, 2021.

CABINET ASSEMBLY

NEMA, TS-2, Pole-Mount/Base-Mount (12 and 16 positions), SDLC Traffic Controller Assembly without ABC Connectors

Manufacturer/Distributor	Model/Number
Econolite	CAB17366 (E) (Size 6, 16-position, Base Mount) <ul style="list-style-type: none"> Model P44 Part# 170-1020-521-2-84
	CAB17366 (Size 6, 16-position, Base Mount) <ul style="list-style-type: none"> Model P44 Part# 170-1020-521-2
Henke Enterprises, Inc.	M128T-TS2-1 (Size 5, 12-position, Pole Mount)
	P128T-TS2-1 (Size 6, 12-position, Base Mount)
	P168T-TS2-1 (Size 6, 16-position, Base Mount)
	HEN-TS2 (Size 6, 16-position, Base Mount)
McCain	M47800 (Size 6, 16-position, Base Mount)
Mobotrex Distribution (formerly Brown Traffic)	EL702-TX2 (Size 5, 12-position, Base Mount)
	EL702-TX2P (Size 5, 12-position, Pole Mount)
	EL712-TX2 (Size 6, 16-position, Base Mount)
Paradigm Traffic Systems, Inc.	PT-M55128TS2-1 (Size 5, 12-position, Pole Mount)
	PT-P44128TS2-1 (Size 6, 12-position, Base Mount)
	PT-P44168TS2-1 (Size 6, 16-position, Base Mount)

CABINET ASSEMBLY

NEMA, TS-2, Pole-Mount/Base-Mount (12 and 16 positions), SDLC Traffic Controller Assembly without ABC Connectors

Manufacturer/Distributor	Model/Number
Peek Traffic Corp.	8500-17568 (Size 6, 16-position, Base Mount)
	8500-17568-01 (Size 6, 16-position, Base Mount)
RTC Manufacturing	TS-2-P16-TX (Size 6, 16-position, Base Mount)
Trafficware (Engineered by Naztec)	70006-TS2TX (Size 6, 16-position, Base Mount)
	70006-3044 (Size 6, 16-position, Base Mount)
	70006-3044 (E) (Size 6, 16-position, Base Mount)
	70006-TS2TX12 (Size 6, 12-position, Base Mount)
	70008-TS2TX12 (Size 5, 16-position, Base Mount)
	70006-3060 (Size 6, 16-position, Base Mount)

Malfunction Management Unit (MMU)

Manufacturer/Distributor	Model/Number	Firmware Ver.
Eberle Design (EDI)	****MMU-16LE	**
	***MMU-16LEip	**
	***MMU2-16LE	7.4
	MMU2-16LEip	7.4
Eberle Design (EDI) Software	ECcom	4.5
Trafficware (Engineered by Naztec)	516L MMU	2.28

**Not NEMA FYA compliant unless updated to 7.3, then they become MMU2's which meets the NEMA FYA Standard.

***These models are not to be purchased anymore.

Flasher Load Switch

NEMA, TS-2, TWO CIRCUIT, SOLID STATE, 15-AMP

Manufacturer/Distributor	Model/Number
Eberle Design (EDI)	810
GDI	204
PDC	204

Load Switch

NEMA, TS-2, THREE CIRCUIT, SOLID STATE, 10-AMP

Manufacturer/Distributor	Model/Number
Eberle Design (EDI)	510
PDC	200
TSC	200

Bus Interface Unit (BIU)

NEMA, TS-2

Manufacturer/Distributor	Model/Number
Eberle Design (EDI)	BIU-700
Econolite	160-1003-501
Eagle (By Mobotrex formerly Siemens)	BIU-200
Trafficware (Engineered by Naztec)	BIU-130
	BIU-700-TW (Same as EDI BIU-700)

Power Supply (PS)**NEMA, TS-2**

Manufacturer/Distributor	Model/Number
Eberle Design (EDI)	PS 250 A
	PS 250 B
Eagle (Mobotrex Distribution, formerly Brown Traffic)	CPS 105
Trafficware (Engineered by Naztec)	PS2D

Surge Protection Device (SPD)

Manufacturer/Distributor	Model/Number
Citel	DS72US-120S/G (SPD)
	DUC31 (EMI/RFI Filter)
	DS72US-120S/G-F-ASSM (SPD & Filter)
	M50-120S-A (SPD)
	M50-120S-B (SPD)
	M50F-120S-A (SPD & Filter)
	M50F-120S-B (SPD & Filter)
Dehn	SN 4616 (Part#989409/S)
Eaton	ITCF1203-RJ
Emerson	SHA-1235FS
HESCO	SPD130KV2

**MATERIAL PRODUCER LIST (MPL) FOR
BATTERY BACK-UP SYSTEM FOR SIGNAL CABINETS**

The following products are pre-qualified for use on the projects where Back-Up System for Signal Cabinets are furnished or installed as required by the plans or item descriptive codes. Battery Back-Up System assemblies are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

**Battery Back-Up Systems
for Signal Cabinets**

Manufacturer/Distributor	Model/Number
Alpha Technologies, Inc. (Sold by Paradigm Traffic)	<p><u>UPS Assembly:</u></p> <ul style="list-style-type: none"> • S6-FXM2-4X1810229 <p><u>Inverter/Charger:</u></p> <ul style="list-style-type: none"> • FXM-2000, 120V i/o, 48VDC, SNMP-017-232-31 • FXM-HP 2000 (Part #0170022-001) <p><u>Cabinet:</u></p> <ul style="list-style-type: none"> • TXDOT S6 w/o Gen w/RM UATS, Srg, BCK, SrvcPnl-026-053-75 <p><u>Batteries:</u></p> <ul style="list-style-type: none"> • 4ea. – Alpha Cell 240XTV Battery, 12V, 112Ah, Top M6Fem Term-1810229
American Power Conversion (APC) (Sold by Consolidated Traffic Controls)	<p><u>UPS Assembly:</u></p> <ul style="list-style-type: none"> • APC-TXDOT <p><u>Inverter/Charger:</u></p> <ul style="list-style-type: none"> • IND1K3H12SB (Includes Smart UPS 1300W (XU1K3LLXRCC) and SBU) <p><u>Cabinet:</u></p> <ul style="list-style-type: none"> • CTCBBS (260012) <p><u>Batteries:</u></p> <ul style="list-style-type: none"> • 4ea. – Interstate DCM0100L • 4ea. – MK8A30 HEI batteries

**Battery Back-Up Systems
for Signal Cabinets**

Manufacturer/Distributor	Model/Number
Clary (Sold by Texas Highway Products)	<u>UPS Assembly:</u> <ul style="list-style-type: none"> • Clary SP2000LX-N Assembly • Clary SP2000LX-N/48 Assembly <u>Inverter/Charger:</u> <ul style="list-style-type: none"> • SP2000LX • SP200LX-N/48 <u>Cabinet:</u> <ul style="list-style-type: none"> • Bison Cabinet-014406 <u>Batteries:</u> <ul style="list-style-type: none"> • 8ea. - OPB-1251 • 8ea. - MK 8A24HEI • 4ea. - SLA1195 (Interstate)
Marathon (Sold by Wildcat Traffic)	<u>UPS Assembly:</u> <ul style="list-style-type: none"> • CTRS-2004-01 <u>Inverter/Charger:</u> <ul style="list-style-type: none"> • Marathon Power 2000VA/1500W (Part# TRTC-2004-N1) <u>Cabinet:</u> <ul style="list-style-type: none"> • Southern Manufacturing 49H22W17D BBS Enclosure (New Cabinet Design) <u>Batteries:</u> <ul style="list-style-type: none"> • 4ea. - MK 8A30 HEI
Multilink (Sold by Mobotrex)	<u>UPS Assembly:</u> <ul style="list-style-type: none"> • MBBU-L2200 <u>Inverter/Charger:</u> <ul style="list-style-type: none"> • 8005-0130-UPS2200-ML (w/UPS cable assembly) <u>Cabinet:</u> <ul style="list-style-type: none"> • EL762TX1 <u>Batteries:</u> <ul style="list-style-type: none"> • 4ea. - MK 8A30 HEI

**Battery Back-Up Systems
for Signal Cabinets**

Manufacturer/Distributor	Model/Number
Myers Power Products (Sold by Iteris)	<u>UPS Assembly:</u> <ul style="list-style-type: none"> • MP200E/EL762TX1 <u>Inverter/Charger:</u> <ul style="list-style-type: none"> • MP2000E <u>Cabinet:</u> <ul style="list-style-type: none"> • BC1280 (w/ MK 31HR4000S batteries) • EL762TX1 (w/ MK 8A30HEI batteries) <u>Batteries:</u> <ul style="list-style-type: none"> • 4ea. - MK 31HR4000S • 4ea. - MK8A30HEI
Peek Traffic (Sold by Peek)	<u>UPS Assembly:</u> <ul style="list-style-type: none"> • 5200#15774 (BBU TxDOT Approved / No Batteries Included) <u>Inverter/Charger:</u> <ul style="list-style-type: none"> • PB-2000 ITS (Power Back) (2M40-0084 PB2000 w/Ethernet Card) <u>Cabinet:</u> <ul style="list-style-type: none"> • 5201-0002 (Cabinet Shell w/Shelves & 1 Fan Assembly) <u>Batteries:</u> <ul style="list-style-type: none"> • 4ea. - Universal UB121100 (2X60-0007) • 4ea. - Interstate 12MQ3000 (2X65-0011)
Trafficware (Engineered by Naztec) (Sold by Trafficware)	<u>UPS Assembly:</u> <ul style="list-style-type: none"> • 50450-200-ML-TX (MultiLink) <u>Inverter/Charger:</u> <ul style="list-style-type: none"> • 8005-0130-UPS2200-ML <u>Cabinet:</u> <ul style="list-style-type: none"> • 50450-2000-MLAUX <u>Batteries:</u> <ul style="list-style-type: none"> • 4ea. - MK 8A30HEI

**Battery Back-Up Systems
for Signal Cabinets**

Manufacturer/Distributor	Model/Number
ZincFive (Sold by Mobotrex)	<p><u>UPS Assembly:</u></p> <ul style="list-style-type: none"> • CAB-Z5-GEN1-001 • UPStealth 2 UPS 1500 XRT <p><u>Inverter/Charger:</u></p> <ul style="list-style-type: none"> • Z5-Inverter-NEMA-01-HD • 09000-00200-00006 / 09000-00200-00012 (UPStealth 2 UPS Controller) (XRT-Battery Charger/Monitor) <p><u>Cabinet:</u></p> <ul style="list-style-type: none"> • EL762-005-01 • CAB-GEN2-XRT <p><u>Batteries:</u></p> <ul style="list-style-type: none"> • 9ea. - Z5-Battery-500-N-01 • 4ea. - 01200-00500-00004 (13V 80Ah H S Nickel-Zinc Battery)

MATERIAL PRODUCER LIST (MPL) FOR NETWORKED SCHOOL ZONE FLASHER SYSTEMS

The following products are pre-qualified for use on the projects where Networked School Zone Flasher Systems are furnished or installed as required by the plans or item descriptive codes. Networked School Zone Flasher Systems are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

Networked School Zone Flasher Systems

Manufacturer/Distributor	Model/Number
Applied Information	System consists of the following: <u>Time Clock</u> <ul style="list-style-type: none"> • AI-500-070 <u>Software:</u> <ul style="list-style-type: none"> • Glance (Cloud Based)
Encom	Harmony System consists of the following: <u>Time Clock</u> <ul style="list-style-type: none"> • EH 600 DC Gateway • EH 600 AC Gateway • EH 500 AC (SBX Remote) • EH 500 DC (SBX Remote) <u>Software:</u> <ul style="list-style-type: none"> • Stratos
Eltec Traffic Products	System 3000 System consists of the following: <u>Time Clock</u> <ul style="list-style-type: none"> • Lang 3000 • TC-3000 <u>Software:</u> <ul style="list-style-type: none"> • DLPRO 3000 <u>Notes:</u> Uses 900MHz radios for Lang and TC Clocks, with TxDOT approved cellular modem. For solar applications, a lower power usage modem is recommended. TxDOT TRF-TM has this info on recommended models.
RTC Manufacturing	RTC Connect System consists of the following: <u>Time Clock</u> <ul style="list-style-type: none"> • APP22 • (Optional): Guardian (AC & DC Models) <u>Software:</u> <ul style="list-style-type: none"> • RTC Connect (Software on PC) * • RTC Connect (Cloud Based) ** <u>Notes:</u> Uses either vendor supplied cellular modem or TxDOT approved cellular modem. * Contact TRF-TM for further details when using a TxDOT supplied modem with RTC system. ** For cloud based solution from RTC, it is recommended to use the vendor supplied cellular router.

MATERIAL PRODUCER LIST (MPL) FOR RADAR VEHICLE DETECTION SYSTEMS

The following products are pre-qualified for use on the projects where Radar Vehicle Detection Systems are furnished or installed as required by the plans or item descriptive codes. Radar Vehicle Detection Systems are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

Radar Vehicle Detection Systems

Manufacturer/Distributor	Model/Number
FLIR	Trafiradar (Advance Detection)
Iteris	Vantage Vector (Advance Detection)
	Vantage Radius (Presence Detection)
Smartmicro	Type 44 (Presence Detection) <ul style="list-style-type: none"> • UMRR11 Sensor (Full Duplex) • Works with TMIB V2 Only
	Type 42 (Presence & Advance Detection) <ul style="list-style-type: none"> • C Sensor (Full Duplex) • Works with TMIB V2 Only
MS Sedco	Intersector (Presence & Advance Detection) <ul style="list-style-type: none"> • P/N # TC-CK1-SBE
	Intersector (Advance Detection) <ul style="list-style-type: none"> • P/N # TC-CK1-VMS
Wavetronix	WX-SS-200 (Advance Detection)
	WX-SS225 (Presence Detection)

*Econolite Accuscan Radar and the Smartmicro Type 32 (Advance Detection) Radar that was previously listed has been discontinued and removed from MPL, per manufacturers request. Existing Smartmicro Type 32 (Advance Detection) Radar units are not compatible with Siemens M60/ATC8309 Linux Controllers when using SDLC. Use expansion module (contact closure) cards.

**MATERIAL PRODUCER LIST (MPL) FOR
VIDEO IMAGING VEHICLE DETECTION SYSTEMS (Intersection Control Only)**

The following products are pre-qualified for use on the projects where Video Imaging Vehicle Detection Systems are furnished or installed as required by the plans or item descriptive codes. Video Imaging Vehicle Detection Systems are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

**Video Imaging Vehicle
Detection Systems**

Manufacturer/Distributor	Model/Number
Control Technologies of Texas	Traficon VIP 3.1 (single camera input)
	Traficon VIP 3.2 (two camera input)
	Traficon VIP/3D.2 Edge (dual camera video detection processor)
	Traficon VIP/3D.1 Edge (single camera video detection processor)
	Traficon Viewcom E (Ethernet or serial communication interface for remote video viewing of the VIP/3D.1 or VIP/3D.2 Edge video processor)
Iteris, Inc.	Iteris Edge 2-2N TEXAS
Paradigm Traffic Systems, Inc.	Econolite Autoscope Solo Pro
	Econolite Autoscope Rackvision
	Econolite Autoscope Rackvision Terra
	Econolite Autoscope Rackvision Pro2
Peek Traffic Corporation	VideoTrak-IQ
Trafficware (Engineered by Naztec)	Traficon VU BIU
	Traficon VU COM
	Traficon VU 2 Series (includes VU 2 & VU 2F two camera input)
	Traficon VU 1 Series (includes VU 1 & VU 1F one camera input)

Surge Protection Devices (SPDs) for Video Imaging Vehicle Detection Systems

Manufacturer/Distributor	Model/Number
Citel	P8AX09-B/FF (SPD Coax for VIVDS)

**MATERIAL PRODUCER LIST (MPL) FOR
VIDEO IMAGING VEHICLE DETECTION SYSTEMS
(For Intersection Stop Line Detection)**

The following products are pre-qualified for use on the projects where Video Imaging Vehicle Detection Systems (For Intersection Stop Line Detection) are furnished or installed as required by the plans or item descriptive codes. Video Imaging Vehicle Detection Systems (For Intersection Stop Line Detection) are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

**Video Imaging Vehicle
Detection Systems (For Intersection Stop Line Detection)**

Manufacturer/Distributor	Model/Number
Econolite	<u>Autoscope Encore System</u> <ul style="list-style-type: none"> • Camera (Encore) • Interface Panel (TIP) (Power Dist. Panel) • Access Point (TAP) • Autoscope Software Suite (Software for Remote Config.)
FLIR	<u>Trafiradar System</u> <ul style="list-style-type: none"> • Cam/Sensor • Power Distribution Panel • TI X-Stream Edge Interface • PIM (Used with TS2 SDLC for additional 64 outputs) • 4/Os xp Expansion Boards (For additional outputs) • Traficon Configuration Tool (Software Used for remote config)
Gridsmart	<u>Gridsmart System</u> <ul style="list-style-type: none"> • Camera • GS2 • Gridsmart Client (Software for Remote Config.)
Iteris	<u>Vantage Vector System</u> <ul style="list-style-type: none"> • Camera/Sensor • Power Distribution Panel • Processor • VRAS (Software for Remote Config.)
	<u>Vantage Next System</u> <ul style="list-style-type: none"> • Camera • CCU (Power Distribution Panel) • Processor • Next Setup Tool/Viewer (Software for Remote Config.)

**Video Imaging Vehicle
Detection Systems (For Intersection Stop Line Detection)**

Manufacturer/Distributor	Model/Number
ITS Plus, Inc.	<u>ITS Plus System</u> <ul style="list-style-type: none"> • Camera • Power Distribution Panel • Processor • SVS (Software for Remote Config.)

**Surge Protection Devices (SPDs) for Video Imaging Vehicle Detection Systems
(For Intersection Stop Line Detection)**

Manufacturer/Distributor	Model/Number
Citel	CGMJ8-POE-A (SPD POE for VIVDS)

**MATERIAL PRODUCER LIST (MPL) FOR
WIRELESS MAGNETOMETER VEHICLE DETECTION SYSTEMS**

The following products are pre-qualified for use on the projects where Wireless Magnetometer Vehicle Detection Systems are furnished or installed as required by the plans or item descriptive codes. Wireless Magnetometer Vehicle Detection Systems are subject to testing. No substitutions of products will be allowed when pre-qualified products are shown.

Wireless Magnetometer Vehicle Detection Systems

Manufacturer/Distributor	Model/Number
Sensys Networks	VDS240
Trafficware	Valence Pod System