



Electrical Analysis

8/7/2023

Bid #: 1089 **Job #:**

Desc: Santaquin Aerial **Sales Rep:** Frisby, Chad

Customer: Santaquin City Fire Department **Organization:** Siddons-Martin Emergency Group

Option: Pierce Command Zone, Advanced Electronics & Control System, Enforcer, WiFi CZT **Type:** Multiplexed

Option	Description	Type*	Minimum Load	Intermittent Load	Total Connected
0001244	High Idle w/Electronic Engine, Custom		0.00	1.20	0.00
0002617	PTO switch, w/light - aerial		0.00	0.00	0.08
0006825	Reel, Elect Cable, Hannay, 1600, (3) Wire		0.00	36.00	0.00
0015216	Reel, Booster, Aluminum - Over Pump, Right Side		0.00	36.00	0.00
0072153	Primer, Trident, Air Prime, Air Operated		0.00	0.01	0.00
0079166	Batteries, (4) Stryten/Exide Grp 31, 950 CCA ea, Threaded Stud		0.00	3.00	0.00
0543751	Light, Do Not Move Apparatus		0.00	0.80	0.00
0549333	Indicators, Engine, Included with Pressure Controller		0.00	0.35	0.00
0583938	Lights, Engine Compt, Custom, Auto Sw, WIn 3SC0CDCR, 3"		0.00	0.30	0.00
0589905	Alarm, Back-up Warning, PRECO 1040		0.00	0.50	0.00
0593759	ESC/ABS/ATC Wabco Brake System, Tandem Rear Axle, 2010		0.00	6.00	0.00
0602622	Portable Hand Light, Provided by Fire Department, Quint NFPA		0.00	0.50	0.00
0604028	Water Level Gauge, FRC, MaxVision WLA280-A00 Programmable		0.00	0.00	0.00
0618458	Light, Pump Compt, WIn 3SC0CDCR LED White, PUC		0.00	0.36	0.00
0630636	Controls, Electric Roll-Up Windows, 4dr, 4 Driver Controls, Saber		0.00	26.00	0.00
0644201	Cab Lift, Elec/Hyd, Saber FR/Enforcer		0.00	180.00	0.00
0672937	Lights, Side, WIn WIONSMC* LED, Chrome Flange, Mounted In		0.00	0.00	4.00
0727913	Spotlight, Golight/RadioRay, Model 20**4GT, LED, 2 Lts		0.00	0.00	7.40
0735687	Engine Brake, Fully Integrated, Paccar MX13 Engine		0.00	0.42	0.00
0750196	Light, Accent, Amdor AY-LB-12HB012, LED, Each		0.00	0.00	0.18
0802935	Light, Directional, WIn M62T* LED, Cmn Bzl, Above Headlights,		0.00	1.50	0.00
0804781	Aerial Scene Lts Separated into Aerial Tip Category and Aerial		0.00	0.00	0.00
0806466	Lights, Backup, WIn M62BU, LED, For Tail Lt Housing		0.00	3.20	0.00
0808297	Intercom, Firecom 5100D Single Radio, 1 Wireless Base Station,		0.00	0.00	0.50
0816158	Camera, Pierce, LS Mux, RS, LS, R, Cameras, AHD		0.00	1.20	0.00
0888882	Lights, WIn, PSL2B* Pioneer, 12 VDC, 2nd		0.00	0.00	6.00
0888885	Lights, WIn, PSL2B* Pioneer, 12 VDC, 1st		0.00	0.00	6.00
0895310	Siren, Federal Q2B		0.00	100.00	0.00
0896616	Lights, Door Interior Flash, 4 Dr Cab, Weldon 8401-0000-20 Strip		0.00	0.64	0.00
0548004	Wiring, Spare, 15 A 12V DC 1st	Load Managed	0.00	0.00	30.00
0618906	Lighting, Rung, LED, TecNiq, 4 Section, Base, Lower/Upper Mid,	Load Managed	0.00	0.00	20.00
0722696	HVAC, Enforcer, CARE	Load Managed	0.00	0.00	100.00
0776357	Light, Visor, WIn, 12V P*H2* Pioneer, Cnt Feature, 1st	Load Managed	0.00	0.00	13.00
0893374	Lights, WIn, M9LZC Gradient, 12 VDC, 1st	Load Managed	0.00	0.00	12.00
0893377	Lights, WIn, M9LZC Gradient, 12 VDC, 2nd	Load Managed	0.00	0.00	6.00
0893380	Lights, WIn, M9LZC Gradient, 12 VDC, 1st	Load Managed	0.00	0.00	6.00
0002615	Switch, Aerial 12V Master	NFPA	0.08	0.00	0.00
0002758	Amp Draw, NFPA/ULC Radio Allowance	NFPA	5.00	0.00	0.00
0010758	Flow Meter, Waterway, PAL, 110' Ascendant, MUX	NFPA	0.50	0.00	0.00
0023680	Compt, IPO Stairs RS, Roll-up Door	NFPA	0.90	0.00	0.90
0035382	Compt, RS Turntable, F/H, Roll Dr & Lift Dr, Ascendant Tandem,	NFPA	2.70	0.00	2.70
0063695	Compt, LS F/H F/D, Roll Drs, w/o Chute, Ascendant Tandem,	NFPA	2.70	0.00	2.70
0063727	Compt, LS Turntable, F/H F/D, Roll Dr & Lift Dr, Ascendant	NFPA	1.80	0.00	1.80
0063733	Compt, RS F/H, Roll Drs, Ascendant Tandem, 105 HDL, 100 HAL	NFPA	3.60	0.00	3.60
0068703	Lights, Grote Supernova LED, Stabilizer Beam, (1) Set	NFPA	1.60	0.00	0.00
0088745	Light, Rear Zone Up, WIn L31HRFN LED Beacon, Red LED	NFPA	3.20	4.80	0.00
0092582	Load Manager/Sequencer, MUX	NFPA	0.56	0.56	0.00

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply



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0511569	Lights, Clearance/Marker/ID, Rear, P25 LED 7Lts	NFPA	0.50	0.00	0.00
0516983	Gauges, Engine, Included With Pierce Pressure Controller, PUC	NFPA	0.30	0.00	0.00
0517009	Gauge, Water Level, Pierce, In pressure Controller, w/Mini Slave,	NFPA	1.23	0.00	0.00
0525667	Siren, Wln 295SLSA1, 100 or 200 Watt	NFPA	1.56	14.06	0.00
0540384	Lights, Front Zone, Wln M6*C LED, Clear Lens, in Common Bzl	NFPA	1.80	2.70	0.00
0540743	Lights, Stabilizer Warn (2) Sets, Wln M6*C LED, Clear Lens	NFPA	3.60	5.40	0.00
0540783	Lights, Rear Zn Lwr, Wln M6*C LED	NFPA	1.80	2.70	0.00
0601949	Light, Turntable Console, TecNiq T-10, LED Strip Light	NFPA	0.20	0.00	0.00
0601972	Lights, Turntable Walkway, P25, LED	NFPA	0.35	0.00	0.00
0602100	Lights, Torque Box Ladder Storage, Pierce LED Strip Lights, 2 Lts	NFPA	1.00	0.00	0.00
0603606	Cab Instruments, Ivory Gauges, Chrome Bezels, Enf MUX	NFPA	1.26	0.00	0.00
0605610	Lightbar, Wln, Freedom IV-Q, 2-21.5", RRRRR RRRRR, 30 Deg	NFPA	6.48	0.00	9.76
0615121	Vehicle Information Center, 7" Color Display, MUX, Additional,	NFPA	1.20	0.00	0.00
0615386	Vehicle Information Center, 7" Color Display, Touchscreen, MUX	NFPA	1.20	0.00	0.00
0615864	Lights, Perimeter Body, Truck-Lite 44308C LED 1lt, Turntable	NFPA	0.50	0.00	0.00
0617092	Air Dryer, Wabco System Saver 1200, With Wet Tank,	NFPA	7.81	0.00	0.00
0620054	Light, Directional/Marker, Intermediate, Weldon 9186-8580-29	NFPA	0.10	0.90	0.00
0642225	Lights, Side Zone Lower, Wln M7*C, M6*C, M6*C, Clear Lens, 6lts	NFPA	5.40	8.10	0.00
0647644	Lights, Dome, FRP Dual LED 6 Lts	NFPA	1.20	1.20	0.00
0647899	Lights, Directional/Marker, Cab Front Side, Weldon 9186-8580-29	NFPA	0.80	0.00	0.00
0653081	Light, Pump Operator & Panel, Side Ctrl, PUC, 60354C LED Cab	NFPA	2.00	0.00	0.00
0653937	Flasher, Headlight Alternating	NFPA	0.08	0.00	0.00
0667186	Light, Slide-Out Pump Operator Step, On Scene Solutions Access	NFPA	0.65	0.00	0.00
0709438	Lights, Walk Surf, FRP Flood, LED	NFPA	2.00	0.00	0.00
0724463	Controller, Pressure, Pierce LCD, PUC	NFPA	1.70	0.00	0.00
0729601	Generator, Harrison 6kW MSV 120/240V, Hydraulic, Digital Volt,	NFPA	35.31	0.00	0.00
0731813	Hour Meter, Aerial, Included in Information Centers, ASL, AAT,	NFPA	0.10	0.00	0.00
0735474	Lights, Clearance/Marker/ID, Front, P25 LED 7 Lts, Saber	NFPA	0.35	0.00	0.00
0737181	Intercom, 2-Way Fire Research ICA910 Hands Free	NFPA	0.50	0.00	0.00
0739224	Indicator Light @ Pump Panel, Throttle Ready, Incl w/Pressure	NFPA	0.10	0.00	0.00
0755095	Aerial, 107' ASL Tandem, 750/500 Tip, 50 MPH	NFPA	5.00	0.00	0.00
0757997	Cabinet, Rear Facing, LS, 23 W x 40.25 H x 26.75 D, Lap, Ext	NFPA	0.78	0.78	0.00
0762388	Lights, Stabilizer Scene, (2) sets, Amdor AY-LB-12HW012, LED	NFPA	0.72	0.00	0.00
0762413	Light, Boom Support, Amdor AY-LB-12HW012, 12" LED	NFPA	0.18	0.00	0.00
0767457	Cabinet, Rear Facing, RS, 22 W x 43 H x 26.75 D, Lap, Ext Acc,	NFPA	0.30	0.30	0.00
0769420	Lights, Perimeter Cab, Amdor AY-LB-12HW020 LED 4Dr	NFPA	1.20	0.00	0.00
0769572	Lights, Perimeter Pump House, Amdor AY-LB-12HW020 LED 2lts	NFPA	0.58	0.00	0.00
0783157	Headlights, Rect LED, JW Spkr Evo 2, Heat,	NFPA	6.60	6.60	0.00
0787314	Cab, Enforcer, 8410 w/Notch, PUC	NFPA	6.80	10.20	0.00
0791501	Light, Traffic Directing, Wln TAL65, 36" Long LED, Aerials	NFPA	0.60	1.20	0.00
0793038	Control Stations, ASL Tandem Axle, MUX, Color Display	NFPA	4.26	0.00	0.00
0802753	Lights, Tracking, Wln MP** LED, 2lts	NFPA	8.00	0.00	0.00
0803462	Lights, Tip, Wln MP** LED, 2lts	NFPA	8.00	0.00	0.00
0804514	Lights, Tail, Wln M62BTT* Red Stop/Tail & M62T* Amber Dir Arw	NFPA	0.83	2.49	0.00
0805281	Camera System, Pierce, Mux, Wireless Fixed Camera, Egress to	NFPA	1.20	0.00	0.00
0811018	Engine, Paccar MX13, 510HP, 1850 lb-ftW/OBD, EPA 2024,	NFPA	6.00	0.00	0.00
0887546	Trans, Allison 6th Gen, 4000 EVS P, w/Prognostics,	NFPA	2.00	2.00	0.00
0889521	DEF Tank, 7.3 Gallon, LS Fill, Under Cab, Paccar, Lift Up Fill Dr,	NFPA	0.60	11.40	0.00

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Option	Description	Type*	Minimum Load	Intermittent Load	Total Connected
0889577	Bracket, License Plate & Light, P25 LED, Stainless Brkt	NFPA	0.07	0.00	0.00
0889980	Lights, Step (3), P25 LED, One Side	NFPA	0.15	0.00	0.00
0892638	Lights, Cab & Crw Cab Acs Stps, P25, LED w/Bezel, 6lts	NFPA	1.00	0.00	0.00
0898617	Lights, Hose Bed, Sides, Dual Strips, 45 Ends	NFPA	3.30	0.00	0.00
0647729	Alternator, 320 amp, Delco Remy 40SI	S	0.00	0.00	0.00
Load Totals:			161.89	473.37	232.62

Note: Minimum Continuous Load is in "Blocking Right of Way" mode.(Reference current edition of NFPA 1901)

Note: Intermittent Load items are not factored in on any alternator load comparisons. These items are included on the report for reference only and should be looked at as amp draw exclusion items. (Reference current edition of NFPA 1901)

Note: Total Connected Load "Demand" represents Total Connected Load minus any Load Managed items

Alternator Output at Idle: 210.00

Minimum Continuous Load	
Supply:	210.00
Demand:	161.89
Variance:	48.11

Alternator Output at Governed Speed: 288.00

Total Connected Load	
Supply:	288.00
Demand:	207.51
Variance:	80.49

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply