



Overview of Wireless Tow Alarm System TS0525

The Wireless Tow Alarm System TS0525 is an integrated tow flood/fire monitoring system. This system is capable of continuously monitoring fire and flood sensor data from the vessel being towed, for display in the pilothouse of the towing vessel. During an alarm condition, the type and location of alarm are displayed on the keypad. A Light Tower, with three separate lights, and a siren is placed on vessel being towed and provides an audible and additional visual indication of an alarm.

The Remote Control Station receives 120-volt AC power from the vessel. It also has an internal backup battery. The Towed Vessel equipment is designed to operate using eight battery packs.

The Wireless Tow Alarm is shipped with the components strapped to standard pallets.

System Components for TS0525

Alternates

ESSM No	Nomenclature	Type	Qty	NS	Cont
AL0250	REMOTE CONTROL STATION, WIRELESS TOW ALARM SYSTEM	BL	1		
AL0255	LOCAL CONTROL STATION, WIRELESS TOW ALARM SYSTEM	BL	1		
AL0260	LIGHT TOWER, WIRELESS TOW ALARM SYSTEM	BL	1		
AL0265	SENSORS AND REPEATERS, WIRELESS TOW ALARM SYSTEM	BL	1		
AL0270	SPARE PARTS KIT, WIRELESS TOW ALARM SYSTEM	BL	1		
AL0275	BATTERY PACK, WIRELESS TOW ALARM SYSTEM	BL	8		
AL0280	BATTERY CHARGER, WIRELESS TOW ALARM SYSTEM	BL	1		

Baseline verified on 11/17/2017, * Not shown in catalog.

ESSM - AL0250
REMOTE CONTROL STATION, WIRELESS TOW ALARM SYSTEM



Wireless Tow Alarm System AL0250

Remote Control Station contains an Inovonics Wireless Guardian receiver and keypad, laptop, printer, and battery backup; all contained within a pelican case. The Inovonics equipment receives all sensor data sent from the Local Control Station and makes it available for display on the keypad. The keypad is used to program sensors positioned throughout the vessel being towed, check status, and show alarm information. After an alarm has been acknowledged the keypad can be used to clear the alarms. The receiver will store the last 90 events received from the sensors.

The laptop can be used to communicate with the receiver, allowing for programming of the sensors, checking the sensors status, and retrieving stored data which can be printed using the installed printer.

The Remote Control Station can operate using 120-volts AC, but has a battery backup that can power the unit for about 20 minutes if power is lost.

Specifications		
Type	Description	Qty
Manufacturer	ESSM Facility	
Model	AL0250	
The AL050 contains the following items:		
Container, shipping, 37" x 28" x 18":		1
Keypad, Inovonics		1

WIRELESS TOW ALARM SYSTEM (1ST GENERATION)

System - TS0525

Specifications

Type	Description	Qty
Wireless guardian receiver		1
Inventory, laminated		1
RCS case, 23" x 22" x 19":		1
Computer, laptop, latitude LX, Dell		1
Printer, bubble jet, Canon		1

Physical Characteristics

Type	Descriptions		
	Shipping		
Length	3 ft, 1 in		
Width	2 ft, 4 in		
Height	1 ft, 6 in		
Cube	11 cu ft		
Footprint	8 sq ft		
Weight	60 lb		

References

Ref No	Reference
1	None

ESSM - AL0255
LOCAL CONTROL STATION, WIRELESS TOW ALARM SYSTEM



Local Control Station (LCS) AL0255

The Local Control Station (LCS) AL0255 contains the Inovonics 64 digital receiver (DR), and electronics to control the correct alarm light on the Light Tower. The 64 DR receives data from the installed sensors and during an alarm condition sends the appropriate signal to the light on the Light Tower. The LCS is powered by eight 12 VDC battery packs connected in parallel to provide 30 days of operating power. The ratchet straps are used to tie down the unit while underway.

Specifications		
Type	Description	Qty
Manufacturer	ESSM Facility	
Model	AL0255	
The station contains the following major items:		
Container, shipping, 23" x 18" x 9":		1
Digital receiver, wireless, 64-channel		1
Strap, ratchet, 1" x 10'		4
LCS case, Pelican, 23" x 22"x 9"		1

Physical Characteristics

Type	Descriptions		
	Shipping		
Length	1 ft, 11 in		
Width	1 ft, 6 in		
Height	0 ft, 9 in		
Cube	3 cu ft		
Footprint	3 sq ft		
Weight	24 lb		

References

Ref No	Reference
1	None

ESSM - AL0260
LIGHT TOWER, WIRELESS TOW ALARM SYSTEM



Light Tower AL0260

Light Tower AL0260 contains three alarm lights; yellow for low water, red for high water, and blue for fire. Also included is a siren for audible alarm indications. A relay box is used to control flash duration. A repeater is used to send sensor information to the Remote Control Station. The Light Tower's power and control signals are supplied via a 50-foot cable connected between the Local Control Station and the unit relay box.

Specifications		
Type	Description	Qty
Manufacturer	ESSM Facility	
Model	AL0260	
The kit contains the following major items:		
Container, shipping, 36" x 27" x 19":		1
Cable assembly, 6', relay-to-light bar		1
Extension, mast, 3' section		2
Mast base, magnetic		1
Platform, relay and repeater		1
Platform, strobe light and siren		1
Reel, cable storage		1

WIRELESS TOW ALARM SYSTEM (1ST GENERATION)

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Specifications

Type	Description	Qty
Cable assembly, 50', LCS-to-mast		1
Inventory, laminated		1

Physical Characteristics

Type	Descriptions		
	Shipping		
Length	3 ft, 0 in		
Width	2 ft, 3 in		
Height	1 ft, 7 in		
Cube	11 cu ft		
Footprint	7 sq ft		
Weight	132 lb		

References

Ref No	Reference
1	None

**ESSM - AL0265
SENSORS AND REPEATERS, WIRELESS TOW ALARM SYSTEM**



Sensors and Repeaters Wireless Tow Alarm System AL0265

The Sensors and Repeaters Wireless Tow Alarm System AL0265 contains wireless flood and fire sensors that are placed in the designated spaces aboard the vessel being towed. The sensors are designed to use a magnet or eyebolt for mounting. Two repeaters are provided to help pass a wireless signal to the Light Tower's Repeater on the LCS/RCS.

Specifications		
Type	Description	Qty
Manufacturer	ESSM Facility	
Model	AL0265	
The kit contains the following major items:		
Container, storage/shipping, 31" x 28" x 23":		1
Battery, 3-volt, lithium		24
Repeater, wireless, alarm sensor		2
Sensor, fire, wireless		8
Sensor, water level, wireless		16
System box, w/backing plate		1
Inventory, laminated		1

Physical Characteristics

Type	Descriptions		
	Shipping		
Length	2 ft, 7 in		
Width	2 ft, 4 in		
Height	1 ft, 11 in		
Cube	12 cu ft		
Footprint	7 sq ft		
Weight	106 lb		

References

Ref No	Reference
1	None

ESSM - AL0270
SPARE PARTS KIT, WIRELESS TOW ALARM SYSTEM



Spare Parts Kit AL0270

The Spare Parts Kit AL0270 contains all the materials required to troubleshoot and repair the system back to full operation should component failure occur.

Specifications		
Type	Description	Qty
Manufacturer	ESSM Facility	
Model	AL0270	
The kit contains the following major items:		
Container, storage/shipping, 23" x 19" x 9":		1
Assembly, strobe light, amber		1
Barrel assembly, sensors, various		2
Bulb, strobe light		2
Diode		4
Endplate assembly, various		3
Float reed switch assembly		2
Float, water level sensor		2

WIRELESS TOW ALARM SYSTEM (1ST GENERATION)

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Specifications

Type	Description	Qty
Fuse, slow-blow		4
Fuse, spade connector		6
Grease, silicone for O-ring seals		1
Manuals, various		4
Multimeter, model DM5XL		1
Probe, fire-sensing		2
Timer, cube relay		1
Transmitter, sensor, universal		1
Inventory, laminated		1

Physical Characteristics

Type	Descriptions		
	Shipping		
Length	1 ft, 11 in		
Width	1 ft, 7 in		
Height	0 ft, 9 in		
Cube	3 cu ft		
Footprint	4 sq ft		
Weight	23 lb		

References

Ref No	Reference
1	None

**ESSM - AL0275
BATTERY PACK, WIRELESS TOW ALARM SYSTEM**



Battery Pack AL0275

The Battery Pack AL0275 consists of a shipping container with a 12-volt battery and a connecting cable. The battery is rated at 75 amp-hours. The container is designed with external connectors. The cables connect the battery packs together for a combined total of eight batteries in the system. Lead acid gel cell sealed batteries are normally permitted on aircraft. Each battery pack contains a fuse.

Specifications		
Type	Description	Qty
Manufacturer	ESSM Facility	
Model	AL0275	
The kit contains the following major items:		
Container, modified, 23" x 19" x 9":		1
Battery, gel electrolyte, 12-V, 75 amp-hr		1
Cable, battery, 3'		1
MSDS, lead acid gel battery		1
Inventory, laminated		1

Physical Characteristics

Type	Descriptions		
	Shipping		
Length	1 ft, 11 in		
Width	1 ft, 7 in		
Height	0 ft, 9 in		
Cube	3 cu ft		
Footprint	4 sq ft		
Weight	74 lb		

References

Ref No	Reference
1	None

**ESSM - AL0280
BATTERY CHARGER, WIRELESS TOW ALARM SYSTEM**



Battery Charger AL0280

The Battery Charger AL0280 consists of two battery chargers in a storage/shipping container. The battery chargers are used to charge the AL0275 Battery Packs only.

Specifications		
Type	Description	Qty
Manufacturer	ESSM Facility	
Model	AL0280	
The kit consists of the following major items:		
Case, storage, 23" x 19" x 9":		1
Battery charger, 12/24-volt, 10-amp		2
Inventory, laminated		1

Physical Characteristics			
Type	Descriptions		
	Shipping		
Length	1 ft, 11 in		
Width	1 ft, 7 in		
Height	0 ft, 9 in		

Physical Characteristics

Type	Descriptions		
Cube	3 cu ft		
Footprint	4 sq ft		
Weight	42 lb		

References

Ref No	Reference
1	None