



## **CONFIGURATION SUMMARY**

# **SEARII APPLICATION 9V814-A01C PREPARED FOR THE UNION PACIFIC RAILROAD**

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VERSION C.1

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**DOCUMENT HISTORY**

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A	September 2005	n/a	Initial draft - not released
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C	June 2013	DLW	Initial release
C.1	October 2014	DLW	Rebrand for Siemens

## NOTES, CAUTIONS, AND WARNINGS

Throughout this manual, notes, cautions, and warnings are frequently used to direct the reader's attention to specific information. Use of the three terms is defined as follows:

 **WARNING**

**WARNING**

INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY. WARNINGS ALWAYS TAKE PRECEDENCE OVER NOTES, CAUTIONS, AND ALL OTHER INFORMATION.

 **CAUTION**

**CAUTION**

REFERS TO PROPER PROCEDURES OR PRACTICES WHICH IF NOT STRICTLY OBSERVED, COULD RESULT IN A POTENTIALLY HAZARDOUS SITUATION AND/OR POSSIBLE DAMAGE TO EQUIPMENT. CAUTIONS TAKE PRECEDENCE OVER NOTES AND ALL OTHER INFORMATION, EXCEPT WARNINGS.

**NOTE**

**NOTE**

Generally used to highlight certain information relating to the topic under discussion.

If there are any questions, contact Siemens Industry Inc., Rail Automation Application Engineering.

## ELECTROSTATIC DISCHARGE (ESD) PRECAUTIONS

Static electricity can damage electronic circuitry, particularly low voltage components such as the integrated circuits commonly used throughout the electronics industry. Therefore, procedures have been adopted industry-wide which make it possible to avoid the sometimes invisible damage caused by electrostatic discharge (ESD) during the handling, shipping, and storage of electronic modules and components. Siemens Industry, Inc., Rail Automation has instituted these practices at its manufacturing facility and encourages its customers to adopt them as well to lessen the likelihood of equipment damage in the field due to ESD. Some of the basic protective practices include the following:

- Ground yourself before touching card cages, assemblies, modules, or components.
- Remove power from card cages and assemblies before removing or installing modules.
- Remove circuit boards (modules) from card cages by the ejector lever only. If an ejector lever is not provided, grasp the edge of the circuit board but avoid touching circuit traces or components.
- Handle circuit boards by the edges only.
- Never physically touch circuit board or connector contact fingers or allow these fingers to come in contact with an insulator (e.g., plastic, rubber, etc.).
- When not in use, place circuit boards in approved static-shielding bags, contact fingers first. Remove circuit boards from static-shielding bags by grasping the ejector lever or the edge of the board only. Each bag should include a caution label on the outside indicating static-sensitive contents.
- Cover workbench surfaces used for repair of electronic equipment with static dissipative workbench matting.
- Use integrated circuit extractor/insertor tools designed to remove and install electrostatic-sensitive integrated circuit devices such as PROM's (OK Industries, Inc., Model EX-2 Extractor and Model MOS-40 Insertor (or equivalent) are highly recommended).
- Utilize only anti-static cushioning material in equipment shipping and storage containers.

For information concerning ESD material applications, please contact the Technical Support Staff at 1-800-793-7233. ESD Awareness Classes and additional ESD product information are also available through the Technical Support Staff.

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## 1. INTRODUCTION

This document supports installation and maintenance of SEAR Ili units configured with the 9V814-A01C user program stored in flash memory.

## 2. USER MENU ITEMS – SITE SETUP

The table below lists configuration settings unique to 9V814-A01C. Each row presents an entry in the site setup sequence. The first column shows the text that appears in the SEAR II/Ili Interface display. The four middle columns give the options or define the range of values that may be entered. The rightmost column summarizes conditions that determine if that row's step will appear, for example: 'LAMPS OUT?' entry appears only if the entry for 'ILOD MODULES?' is one or greater.

USER MENU ITEMS – SITE SETUP					
Question	Minimum / Selection 1	Maximum / Selection 2	Selection 3	Selection 4	Condition For Menu To Be Displayed
EXT XING CONTROLLER?	0	3			
BATTERY BANKS?	1	3			
BATTERY MON USED?	NO	YES			
LOW BATT PERCENTAGE?	75%	90%			
HI BATT PERCENTAGE?	110%	120%			
ILOD MODULES?	0	8			
LAMPS OUT?	1	2			"iLOD Modules?" > 0
TEMPERATURE ALARM?	NO	INT	EXT	BOTH	
BULLHORN USED?	NO	YES			
HEALTH REPORT? DAYS	0	30			
LA ALARM ENABLED?	YES	NO			
GD ALARM ENABLED?	YES	NO			
GU ALARM ENABLED?	YES	NO			
TR ALARM ENABLED?	YES	NO			
BA ALARM ENABLED?	YES	NO			
EO ALARM ENABLED?	YES	NO			
PK ALARM ENABLED?	YES	NO			
DO ALARM ENABLED?	NO	YES			
TP ALARM ENABLED?	NO	YES			
AF ALARM ENABLED?	YES	NO			
VH ALARM ENABLED?	NO	YES			
GF ALARM ENABLED?	NO	YES			

### 3. PHYSICAL INPUT ASSIGNMENTS

This table shows the physical inputs available for each function. The inputs can be configured on the available 4000 GCP inputs or the two digital inputs on the SEAR Ili front panel as indicated in the table.

PHYSICAL INPUT ASSIGNMENTS																														
TAG	SEAR Ili		4000 GCP Front Panel																											
	DI O1	DI O2	S P 2 . 1	S P 3 . 1	S P 4 . 1	S P 5 . 1	S P 6 . 1	S C C 7 . 1	S C C 7 . 2	S C C 7 . 3	S C C 7 . 4	S C C 7 . 5	S C C 8 . 1	S C C 8 . 2	S C C 8 . 3	S C C 8 . 4	S C C 8 . 5	I N 1 . 1	I N 1 . 2	I N 2 . 1	I N 2 . 2	I N 3 . 1	I N 3 . 2	I N 4 . 1	I N 4 . 2	I N 5 . 1	I N 5 . 2	I N 6 . 1	I N 6 . 2	
POK 1	X	X	P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
POK 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DOOR 1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DOOR 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NVD	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SVD	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
VDH	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GP 1.1	X	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GP 1.2	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GP 2.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X	X	X	X	X	X
GP 2.2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GD 1.1	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GD 1.2	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GD 1.3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GD 1.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GD 2.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GD 2.2	X	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GD 2.3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GD 2.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TSS 1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
TSS 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
TSS 3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
TSS 4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
TSS 5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
TSS 6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
TSS 7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
TSS 8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
GFT 1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
GFT 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
GFT 3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
General 1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
General 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
General 3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
General 4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TX <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EXT ISL 1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EXT ISL 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EXT ISL 3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
UP defined	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Notes: X Indicates that this input may be used for this indication  
 P Indicates that this is the preferred input for this indication

<sup>1</sup> The TX feature is intended to allow the unit to be set off line remotely and to allow the remote user to reset alarm conditions as well as LED indicators. Normally this input should be driven high. Setting the input low will cause the alarm analyzer to go offline thus no alarms will be triggered while the input is low. Transitioning the input to high will cause all alarm LEDs to clear. Note that the SEAR II will not return online automatically.



#### 4. ECHELON NODE ADDRESS

Echelon Node address		
Assembly	Description	Node Address
A80410	SEAR Ili Module	99
A80271	ILOD Module	7-14
A91210	SSCCIII or SSCCIV	4-6
A80403	GCP 4000 CPU	16
Reserved	Reserved	3

#### 5. BATTERY INPUT CONFIGURATION

Battery Input Configuration		
Name	Channel	Resolution
B12	01	1 VDC
B16A	02	1 VDC
B16B	03	1 VDC
BATT MON	06	1 VDC

#### 6. RELAY OUTPUTS

RELAY OUTPUTS			
Tag	Name	Port/Pin/color	Condition Indicated
RLY1	RLY1 TR DO AF	AUX / 11 / White	TR, DO, AF
RLY2	RLY2 EO TP	AUX / 12 / Red	EO, TP
RLY3	RLY3 GD GU	AUX / 13 / Green	GD, GU
RLY4	RLY4 Door Buzzer	AUX / 24 / Brown	On for 2 seconds after the Door alarm is armed
RLY5	RLY5 XR	AUX / 23 / Blue	XR
RLY6	RLY6 Reserved	AUX / 10 / Orange	N/A
N/A	Common	AUX / 25 / Black	N/A
RLY7	Bull Horn Ctrl	RLY 1	Any Alarm condition
RLY8	RTU ctrl	RLY 2	RTU-1, RTU-2, RTU-3

#### NOTE

#### NOTE

RLY5 is a repeater of the GCP4000 AND1 XR. Therefore if the crossing is normal RLY5 will be closed and when the crossing is active RLY5 will be open.

**7. SEAR III LED CONFIGURATION**

<b>LED Configuration</b>				
<b>LED</b>	<b>Alarm Label</b>	<b>Designator</b>	<b>Checked</b>	<b>Footnotes</b>
T01	LA, CL	LONG ACTIVATION ALARM	ALWAYS	1-4
T02	Reserved	Reserved	Reserved	Reserved
T03	Reserved	Reserved	Reserved	Reserved
T04	GD	GATE DOWN ALARM	TRAIN MOVE	1-3
T05	GU	GATE UP ALARM	TRAIN MOVE	1-3
T06	TR	TROUBLE LITE	ALWAYS	1-3
T07	BA	BATTERY	ALWAYS	1-3
T08	EO	LITE OUT	ALWAYS	1-3
T09	IP, PK, OP	POWER OFF	ALWAYS	1-5
T10	DO	DOOR ALARM	ALWAYS	1-3, 6
T11	TP	TEMPERATURE	ALWAYS	1-3
T12	AF	ANALYZER FAILURE	ALWAYS	1-3
T13	VH	VEHICLE DETECTOR HEALTH	ALWAYS	1-3
T14	GF	GROUND FAULT	ALWAYS	1-3
T15	NO	NORMAL OPERATION	ALWAYS	2,3
T16	OL	ONLINE	ALWAYS	7,8

1. LEDs are OFF when alarm is disabled
2. LEDs are GREEN when alarm is enabled
3. LEDs are RED when alarm condition exists
4. LEDs are YELLOW when CL or IP condition exists
5. LEDs are GREEN SLOW FLASH if OP condition exist
6. LEDs are GREEN FAST FLASH when door is opened and DO alarm is armed
7. LEDs are GREEN if online
8. LEDs are RED if offline

## 8. ALARM CONFIGURATION

Alarm Configuration			
Alarm Number	Alarm Label	Designator	Condition
1	LA	LONG ACTIVATION ALARM	xing active for more than 20 minutes
101	CL	XING CLEARED	Indicates xing cleared for 5 minutes after long activation alarm
2	N/A	Reserved	Reserved
3	N/A	Reserved	Reserved
4	GD	GATE DOWN ALARM	Gate not down in 45 seconds after a xing active
5	GU	GATE UP ALARM	Gate not UP 180 seconds after xing clears
6	TR	TROUBLE LITE	Trouble lite off and POK1,2 on for more than 60 seconds
7	BA	BATTERY	Any battery input that is below or above the user defined thresholds for more than 10 minutes. Low Battery Threshold 75% to 90% of normal operating battery. High Battery Threshold 110% to 120% of normal operating battery.
8	EO	LITE OUT	1 or 2 bulbs out or flash rate <35 or >65
9	IP	INITIAL POWER OFF	POK off for more than 20 minutes
10	PK	POWER OFF	POK off for more than 2 hours
102	OP	POWER	POK ON for 5 minutes after a IP or PK alarm
11	DO	DOOR ALARM	Intrusion alarm. See Below
12	TP	TEMPERATURE	Temperature Above 150 Degrees Fahrenheit
13	AF	ANALYZER FAILURE	SEAR losses communications with any of its installed echelon nodes, Ground Fault Detectors, or TSS units
14	VH	VEHICLE DETECTOR HEALTH	Vehicle health output down for more than 15 seconds
15	GF	Ground Fault	Ground fault detected for more than 20 seconds
103	NO	ONLINE	Pressing the clear alarms key once causes sear to go offline and no alarms are reported during this time pressing clear alarms key a second time causes the sear to go online and reset all alarms. Note SEAR always powers up online after a 2 minute delay and if left offline it will automatically return online in 60 minutes. Also, the unit will set itself offline if the GCP transfers for 2 minutes to allow the GCP to power up.
104	CK	UNIT HEALTH	Sends a health message to the office on a periodic time base as determined by the user.

### NOTE

### NOTE

All alarms and Clear alarms are both recorded and displayed.

### Intrusion alarm Operation

#### Enabling the alarm:

- Enabled by setting up a door1 or door2 input on GCP 4000
- LED T10 will indicate green to show that the intrusion alarm is enabled

#### Arming the alarm:

- The alarm is automatically armed when LED T10 indicates green and the door is closed for 10 seconds
- Intrusion alarm armed appears in log
- CRTU 4 output energizes for 2 seconds. This output may be connected to a buzzer to audibly indicate the intrusion alarm is armed.

**Disarming the alarm:**

- Upon Entering an armed site. LED T10 will be flashing green at a fast rate to indicate that the alarm needs to be disarmed within 60 seconds or an intrusion alarm will occur. Press clear alarms once. This will not take the SEAR II off line.

**NOTE****NOTE**

Closing the door will not stop the alarm timer if the door has been opened for more than 2 seconds. The 2 seconds of debounce is intended to prevent vibration from falsely activating the alarm.

**Intrusion alarm:**

- If the alarm is not disarmed in time. The log will indicate that a DO alarm has occurred and LED T10 will indicate red. Closing the door will not rearm the system until the alarm is cleared by pressing clear alarms once. LED T10 will indicate green and if the door was the only alarm active a NO will occur as well. Note this will not take the SEAR II offline or clear the alarm.

**9. RECORDED MESSAGE SCHEME**

Recorded Message Scheme	
Range	Description
0	Internal SEAR Ili Messages
1-99	Application Alarm
100	Reserved
101-199	Application Alarm Clears
200-299	Application Information Messages
1000-1099	Office Software Alarms
1100-1199	Office Software Alarm Clears

**10. APPLICATION ALARM MESSAGES**

Application Information Messages				
Number	Name	Description	Recorded	Displayed
200	Alarm Analyzer Off Line	Indicates that the alarm analyzer has been turned offline	X	X
201	Alarm Analyzer On Line	Indicates that the alarm analyzer has been turned online	X	
202	Prime Down	Indicates that the prime is down		X
203	Island Occupied	Indicates that the island is down		X
204	XING START	Indicates that the xing has activated	X	
205	XING END	Indicates the end of train move and records the total activation time. Note time is recorded in seconds if less than 2 minutes. Otherwise the activation time is recorded in minutes.	X	
206	WARNING TIME	Indicates the total warning time.	X	
207	PREEMPT TIME	Indicates the total pre-empt time.	X	
208	GD1 TIMER	Indicates that the GD alarm was caused by the GD1 timer expiring and displays the timer value at the moment of the alarm.	X	
209	GD2 TIMER	Indicates that the GD alarm was caused by the GD2 timer expiring and displays the timer value at the moment of the alarm.	X	
210	GD3 TIMER	Indicates that the GD alarm was caused by the GD3 timer expiring and displays the timer value at the moment of the alarm.	X	

<b>Application Information Messages</b>				
<b>Number</b>	<b>Name</b>	<b>Description</b>	<b>Recorded</b>	<b>Displayed</b>
211	GD4 TIMER	Indicates that the GD alarm was caused by the GD4 timer expiring and displays the timer value at the moment of the alarm.	X	
212	GD5 TIMER	Indicates that the GD alarm was caused by the GD5 timer expiring and displays the timer value at the moment of the alarm.	X	
213	GD6 TIMER	Indicates that the GD alarm was caused by the GD6 timer expiring and displays the timer value at the moment of the alarm.	X	
214	GD7 TIMER	Indicates that the GD alarm was caused by the GD7 timer expiring and displays the timer value at the moment of the alarm.	X	
215	GD8 TIMER	Indicates that the GD alarm was caused by the GD8 timer expiring and displays the timer value at the moment of the alarm.	X	
216	GU1 TIMER	Indicates that the GU alarm was caused by the GU1 timer expiring and displays the timer value at the moment of the alarm.	X	
217	GU2 TIMER	Indicates that the GU alarm was caused by the GU2 timer expiring and displays the timer value at the moment of the alarm.	X	
218	GU3 TIMER	Indicates that the GU alarm was caused by the GU3 timer expiring and displays the timer value at the moment of the alarm.	X	
219	GU4 TIMER	Indicates that the GU alarm was caused by the GU4 timer expiring and displays the timer value at the moment of the alarm.	X	
220	GU5 TIMER	Indicates that the GU alarm was caused by the GU5 timer expiring and displays the timer value at the moment of the alarm.	X	
221	GU6 TIMER	Indicates that the GU alarm was caused by the GU6 timer expiring and displays the timer value at the moment of the alarm.	X	
222	GU7 TIMER	Indicates that the GU alarm was caused by the GU7 timer expiring and displays the timer value at the moment of the alarm.	X	
223	GU8 TIMER	Indicates that the GU alarm was caused by the GU8 timer expiring and displays the timer value at the moment of the alarm.	X	
224	B12 FAIL	Indicates that the BA alarm was caused by the B12 bus	X	
225	B16A FAIL	Indicates that the BA alarm was caused by the B16A bus	X	
226	B16B FAIL	Indicates that the BA alarm was caused by the B16B bus	X	
227	BATT MON FAIL	Indicates that the BA alarm was caused by the battery monitor.	X	
228	ILOD1 BULB OUT	Indicates that the EO alarm was caused by a lamp out on iLOD1	X	
229	ILOD1 FLASHRATE	Indicates that the EO alarm was caused by a fashrate less than 35 or greater than 65 on iLOD1	X	
230	ILOD2 BULB OUT	Indicates that the EO alarm was caused by a lamp out on iLOD2	X	

<b>Application Information Messages</b>				
<b>Number</b>	<b>Name</b>	<b>Description</b>	<b>Recorded</b>	<b>Displayed</b>
231	ILOD2 FLASHRATE	Indicates that the EO alarm was caused by a fashrate less than 35 or greater than 65 on iLOD2	X	
232	ILOD3 BULB OUT	Indicates that the EO alarm was caused by a lamp out on iLOD3	X	
233	ILOD3 FLASHRATE	Indicates that the EO alarm was caused by a fashrate less than 35 or greater than 65 on iLOD3	X	
234	ILOD4 BULB OUT	Indicates that the EO alarm was caused by a lamp out on iLOD4	X	
235	ILOD4 FLASHRATE	Indicates that the EO alarm was caused by a fashrate less than 35 or greater than 65 on iLOD4	X	
236	ILOD5 BULB OUT	Indicates that the EO alarm was caused by a lamp out on iLOD5	X	
237	ILOD5 FLASHRATE	Indicates that the EO alarm was caused by a fashrate less than 35 or greater than 65 on iLOD5	X	
238	ILOD6 BULB OUT	Indicates that the EO alarm was caused by a lamp out on iLOD6	X	
239	ILOD6 FLASHRATE	Indicates that the EO alarm was caused by a fashrate less than 35 or greater than 65 on iLOD6	X	
240	ILOD7 BULB OUT	Indicates that the EO alarm was caused by a lamp out on iLOD7	X	
241	ILOD7 FLASHRATE	Indicates that the EO alarm was caused by a fashrate less than 35 or greater than 65 on iLOD7	X	
242	ILOD8 BULB OUT	Indicates that the EO alarm was caused by a lamp out on iLOD8	X	
243	ILOD8 FLASHRATE	Indicates that the EO alarm was caused by a fashrate less than 35 or greater than 65 on iLOD8	X	
244	Intrusion Alarm Armed	Indicates that the intrusion alarm has been armed.	X	
245	Intrusion Alarm Disarmed	Indicates that the intrusion alarm has been disarmed.	X	
246	ILOD1 off line	Indicates that the AF alarm was caused by iLOD1 offline	X	
247	ILOD2 off line	Indicates that the AF alarm was caused by iLOD2 offline	X	
248	TSS1 off line	Indicates that the AF alarm was caused by TSS1 offline	X	
249	TSS2 off line	Indicates that the AF alarm was caused by TSS2 offline	X	
250	TSS3 off line	Indicates that the AF alarm was caused by TSS3 offline	X	
251	TSS4 off line	Indicates that the AF alarm was caused by TSS4 offline	X	
252	GCP off line	Indicates that the AF alarm was caused by GCP offline	X	
253	External xing controller off line	Indicates that the AF alarm was caused by external xing controller offline	X	

**NOTES**

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