3051071 Soft Glo Remote Light Driver



FEATURES

- Allows Soft-Glo master tank level gauges to control discrete lamps, alarms, and valves
- SAE J1939 CAN link operating at 250K
- 8 outputs configured to operate in pairs at 4 tank levels
- Total current output limited to 13A
- Wide operating voltage range of 7 to 40 VDC
- 4.7" x 3.2 x 1.6" watertight IP67 polycarbonate enclosure
- Watertight DT15-12PA Deutsch connector
- 40C to +85C (-40F to +185F) AEC-Q100 Grade 3 Operating Temperature

DIMENSIONS



The 3051071 Soft Glo Remote Light Driver Module is used to interface Soft Glo master tank level gauges with discrete lamps.

The Remote Light Driver Module connects to the Soft Glo J1939 CAN link. The module's 8 high-side outputs mirror the 4 tank levels on the master gauge, each tank level state has 2 independent outputs to simplify wiring of multiple lamps. The module's outputs can be used to control lamps, alarms, or tank autofill system valves. The total current output is limited to 13A.

The Soft Glo Remote Light Driver Module can be configured during system calibration to monitor 1 of 8 different master level gauges on the same CAN link.

The Soft Glo Remote Light Driver Module performs a lamp test when powered on where each output is individually turned on to provide operators with an at-a-glance check of the lamp circuit health.

The module includes a status LED that shows the state of the CAN link.

TECHNICAL SPECIFICATIONS

Operating Voltage	7 to 32 VDC
Current Consumption	45mA @ 12VDC plus total lamp load current
Operating Temperature	-40C TO +85C (-40F TO +185F)
Storage Temperature	-40C TO +85C (-40F TO +185F)
Ingress Protection	IP67
Electrical Protection	Reverse voltage polarity protection on power input
	Internal thermal fuses
	CAN Bus protected to 24V
	ESD protected to J1113-13 specifications
	Transient voltage protected to J1113-11 and J1113-42
Outputs	8X outputs rated at 13A each. (Total current is limited to 13A)
CAN Interface	SAE J1939 CAN 2.0B port operating at 250K
Dimensions	5.9" (4.7") X 3.2" X 1.6"

CONNECTOR PINOUT

CONNECTOR J1:	PIN	DESCRIPTION
POWER, CAN DATA And outputs	1	12VDC POWER
	2	GROUND
DEUTSCH DT15-12PA Mating Connector IS DT06-12SA With W12S Wedgelock	3	OUTPUT 1 – TANK LEVEL 0% TO 25%: FLASHING
	4	OUTPUT 2 – TANK LEVEL 0% TO 25%: FLASHING
	5	OUTPUT 3 – TANK LEVEL 26% TO 50%
	6	OUTPUT 4 – TANK LEVEL 26% TO 50%
	7	OUTPUT 5 – TANK LEVEL 51% TO 75%
	8	OUTPUT 6 – TANK LEVEL 51% TO 75%
	9	OUTPUT 7 – TANK LEVEL 76% TO 100%
	10	OUTPUT 8 – TANK LEVEL 76% TO 100%
	11	CAN LOW
	12	CAN HIGH

CAN MESSAGE FORMAT

The 3051071 Soft Glo Remote Light Driver Module is controlled by data from an Innovative Control proprietary J1939 CAN message using PGN 65456 (0xFFB0).

PGN 65456 INNOVATIVE CONTROLS INC. TANK LEVEL:				
CAN MESSAGE PARAMETER	VALUE			
TRANSMISSION REPETITION RATE	100MS			
PRIORITY	6			
EXTENDED DATA PAGE	0			
DATA PAGE	0			
PDU FORMAT	255 (0XFF)			
PDU SPECIFIC	176 (0XB0)			
PGN	65456			
DATA LENGTH	8			
SOURCE ADDRESS	0XA0 - 0XA7, FOR TANK NUMBER 1 – 8 RESPECTIVELY			

The CAN message details applicable to the Soft Glo Remote Light Driver Module are shown in the table below in *BOLD ITALIC:*

PGN 65456 INNOVATIVE CONTROLS INC. TANK LEVEL DATA FORMAT:		
START POS	LENGTH	PARAMETER NAME
1.1	4 BITS	SENSOR STATUS
1.5	4 BITS	MASTER GAUGE STATE
2.1	8 BITS	TANK LEVEL % FULL 0 TO 100
3.1	1 BIT	DEVICE TYPE
3.2	3 BITS	TANK NUMBER
3.5	4 BITS	MASTER GAUGE DISPLAY TYPE
4.1	8 BITS	ALARM SETPOINT %
5.1	3 BITS	TANK SHAPE
5.4	1 BIT	(RESERVED)
5.5	2 BITS	DEVICE ALARM ACTIVE
5.7	2 BITS	DEVICE ALARM TYPE
6.1	8 BITS	TANK LEVEL PRESSURE SENSOR VOLTAGE
7.1	4 BITS	MASTER GAUGE COLOR SCHEME
7.5	1 BIT	MASTER LEFT MAGNETIC SWITCH STATE
7.6	1 BIT	MASTER RIGHT MAGNETIC SWITCH STATE
7.7	1 BIT	(RESERVED)
8.1	8 BITS	MASTER GAUGE LIGHT SENSOR MEASUREMENT

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