

INFINITYBOX, LLC 6460 West Cortland Street Chicago, Illinois 60707 www.Infinitybox.com

# Infinitybox J1939 inMOTION NGX



### **Product Description:**

The Infinitybox inMOTION NGX Door Control Module is a unique product in the commercial truck market. It offers 2 h-bridge relays, 4-outputs and 8-inputs in a rugged and compact module.

It is intended to be mounted in a door to provide local control of power locks, power windows and low-current indicator lights. It has 8 inputs to provide local control plus to send J1939 messages to other devices on the network. This can simplify the wiring going to doors for vehicle manufacturers and custom cab fabricators. The only wiring required to go to the door is power, ground and the two CAN data wires.

This also has broad applications in custom vehicles where reversing and polarity control are needed. Examples could include power lock control, electrically actuated parking brakes, XY actuator control for sprayers and control of linear actuators.

#### **Electrical Features:**

• Input voltage: 10.0 to 18.0 VDC

• Polarity Control: 2 H-Bridge Relays

• H-Bridge Current Capability: 15-amp intermittent use. 7.5-amp continuous

MOSFET Outputs- 4

 MOSFET Output Current Capability; 1-amp each, up to 4-amps total

• Total Inputs: 8 Ground Switched

• Current Monitoring on each H-Bridge Pair and for all outputs

• Load Dump Protection per ISO 16750-2

### Communication Specifications:

Communications Protocol: J1939

 CAN OPEN and other CAN options available upon request

• J1939 Data Rate Options: 250 / 500 and 1,000 kb/s. Selectable over J1939

• CAN Messages can be assigned to each input. Programmable over J1939

 Current values and cell voltage broadcast periodically over J1939 network

# **Connector Specifications**

 Power & Output Connector: Deutsch / TE Connectivity

Connector: DTM06-12SAWedgelock: WM-12STerminal: 1062-20-0622

 CAN & Input Connector: Deutsch / TE Connectivity

Connector: DTM06-12SBWedgelock: WM-12STerminal: 1062-20-0222



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### Configurability Specifications

- inMOTION NGX Outbound Status Broadcast Rate: 250, 500 and 1,000 milliseconds. User Selectable.
- Outbound message CAN ID and CAN Messaging can be assigned to each input. Messages programmed over J1939.
- Outputs can be set to shut off based on current limit. Configurable over J1939.

#### **Material Specifications**

- Housing and Connector Material: Glass Filled Nylon 6 6/6
- All Materials 94V-0

### **Environmental Specifications**

- Operating Temperature Range: -40 C to 855 C
- Ingress Protection: IP67
- All materials tested to meet automotive chemical exposure, salt spray and salt fog

## inMOTION NGX Dimensions (In Millimeters)



