

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

Infinitybox J1939 MASTERCELL NGX



Product Description:

The MASTERCELL NGX is a flexible J1939 Input Controller. It offers a simple switch interface for any J1939 network with a high number of flexible inputs. It is ruggedized and hardened to thrive in the harshest of environments.

It has 38 ground switched inputs, 8 high-side switched inputs, 1 analogue input and two frequency-based inputs. It also has 8 high-side outputs for local control of low-current indicators.

The CAN messaging for each input and output is easily configurable through a simple laptop application. This configuration also includes logic capability and conditions for the off & on-state for all switches. The MASTERCELL NGX includes a high-visibility LCD screen for powerful troubleshooting and diagnostics of the J1939 system.

Flectrical Features:

• Input voltage: 10.0 to 19.0 VDC

• Total Inputs: 38

o 32 Ground Switched Inputs

o 6 Positive Switched Inputs

 Frequency-Based Inputs: 2 (Engine Speed and Vehicle Speed Sensor)

• Analogue Inputs: 1 (0 to 5 volt)

• Low Current Outputs for Indicators: 8 High Side Outputs

Total Output Current Draw: 4 amps over 8 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 (User selectable)

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

• Integrated inSIGHT LCD screen for set up, troubleshooting and diagnostics

Connector Specifications

- Input Connector: Delphi/Aptiv 100W Micropack 32-Way Sealed Connector
 - (A & B keyed differently)
- CAN Connector: Delphi/Aptiv 100W Micropack 8-Way Sealed Connector



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Configurability Specifications

- MASTERCELL 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.
- Programmable logic can be set for inputs. Programming performed over J1939.

Material Specifications

- MASTERCELL Housing Material: Glass Filled Nylon 6 6/6
- MASTERCELL Cover Material: Clear High-Temperature Polycarbonate
- All Materials 94V-0

Environmental Specifications

- Operating Temperature Range: -40 C to 85 C
- Ingress Protection: IP65
- All materials tested to meet automotive chemical exposure, salt spray and salt fog

MASTERCELL NGX Dimensions (In Millimeters)



