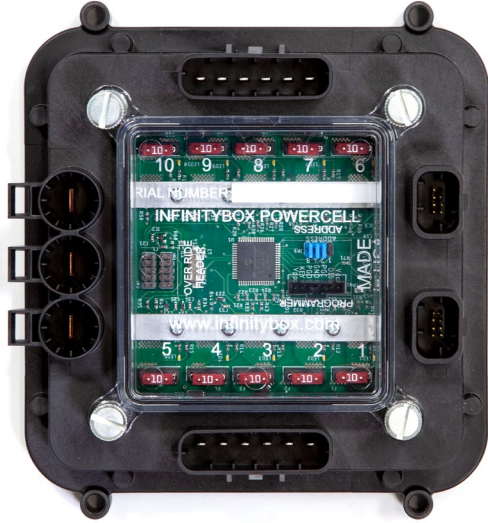


## Infinitybox J1939 POWERCELL NGX



### Product Description:

The J1939 POWERCELL NGX gives you a modular and flexible electrical power distribution unit. It uses solid-state MOSFETs on each output for rugged and durable control. You can connect any J1939 input device to the POWERCELL to control the outputs. These include switch panels, touch screens and other J1939-enabled controllers.

The NGX designates our next generation product. We have added many refinements and enhancements to the POWERCELL NGX. The most significant is the addition of active current monitoring for every output. This gives our customers a powerful view into the operation of their vehicle electrical system. Use this current monitoring for active circuit protection, bulb-fault detection or predictive/preventative maintenance of your vehicles.

The Infinitybox POWERCELL NGX can be used for high-current power distribution in a broad range of vehicles including first responder, service trucks, utility vehicles, construction & agricultural equipment and maintenance of way.

### Electrical Features:

- Input Voltage: 12 or 24 Volt
- Outputs per POWERCELL: 10
- Output Technology: SMART MOSFET with active current monitoring
- Maximum Current per Output: 25-amps
- Output Type: High-Side Switched
- PWM Nodes Per POWERCELL: 8
- Output protected against ESD
- Outputs suppressed for inductive loads
- 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)
- Standard PGN's: User Selectable: (FF00 to FF15)
- Simple CAN Messaging Structure to Control Outputs
- Active Current Monitoring: Periodic broadcast for each output in 0.125 A increments
- Voltage & Temperature Monitoring: Periodic broadcast of system voltage and cell temperature

### Connector Specifications

- Output Connector: Delphi/Aptiv Metripack 280 6-Way Sealed Connector
- Power Input Connector: Delphi/Aptiv Metripack 800 1-Way Sealed Connector
- CAN Connector: Delphi/Aptiv 100W Micropack 8-Way Sealed Connector

## Configurability Specifications

- POWERCELL PGN: Set by hardware jumper (FF00 to FF15)
- POWERCELL Output Behavior: Set by CAN message sent to POWERCELL.
- Simple options for pulse-width modulation and soft-starting for inductive loads.
- POWERCELL J1939 Data Rate: 250, 500 and 1,000 kb/s. User selectable.
- POWERCELL Outbound Status Broadcast Rate: 250, 500 and 1,000 milliseconds. User Selectable.
- Pulse Width Modulation Frequency: 200 Hz. Other frequencies available upon request.

## Material Specifications

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

## Environmental Specifications

- Operating Temperature Range: -40 C to 125 C
- Ingress Protection: IP65
- All materials tested to meet automotive chemical exposure, salt spray and salt fog

## POWERCELL NGX Dimensions (In Millimeters)

