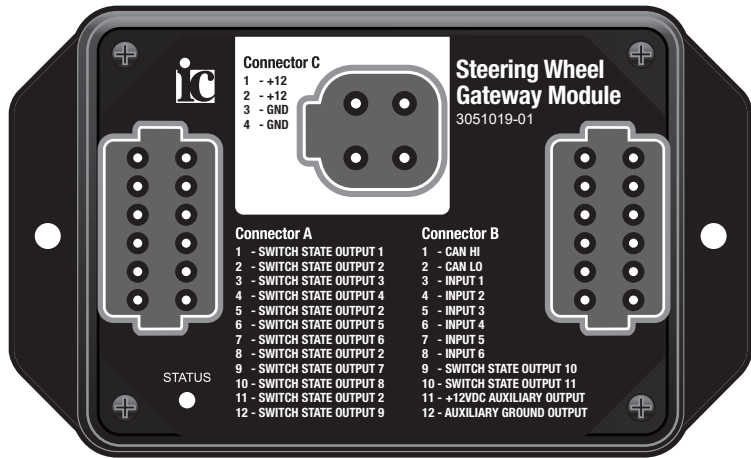




3051019-01 Steering Wheel J1939 Gateway



The 3051019-01 HME Steering Wheel J1939 Gateway Module translates smart steering wheel pushbutton press events into discrete high side outputs. The module receives smart steering wheel status from the Vehicle Improvement Products, Inc SM301 LIN-to-CAN gateway. A red/green status LED provides at-a-glance feedback on the state of the CAN network, diagnostics, and fault conditions.

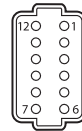
FEATURES

- Converts up to 11 smart steering wheel switches to discrete high side outputs
- Discrete outputs fully protected from over-current, over-voltage, and voltage transient conditions
- Wide operating voltage range of 7 to 40 VDC ensures module REMAINS ACTIVE during vehicle electrical system power disturbances
- 6 auxiliary discrete inputs
- SAE J1939 CAN interface operates at 250K or 500K
- Watertight Deutsch connectors
- 40C to +85C (-40F to +185F) AEC-Q100 Grade 3 Operating Temperature

TECHNICAL SPECIFICATIONS

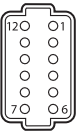
| | |
|------------------------------|---|
| Operating Voltage | 7 to 40 VDC |
| Current Consumption | 40mA |
| Operating Temperature | -40C TO +85C (-40F TO +185F) |
| Storage Temperature | -40C TO +85C (-40F TO +185F) |
| Ingress Protection | IP67 rated enclosure |
| Electrical Protection | Reverse voltage polarity protection on all connections. Internal thermal fuses. CAN Bus protected to 24V. ESD protected to J1113-13 specifications. Transient voltage protected to J1113-11 and J1113-42. Output and input circuits are both protected from reverse polarity. Over-current, over-voltage, and voltage transients. |
| Inputs | 6 auxiliary inputs with selectable polarity |
| Outputs | 9 high side or low side outputs rated at 3A 2 high side outputs rated at 13A |
| CAN Interface | SAE J1939 CAN 2.0B ports operating at 250K or 500K |
| Dimensions | 5.72" x 4.77" x 1.55" |

CONNECTOR A OUTPUTS 1-9 HIGH SIDE OR LOW SIDE



Deutsch DT15-12PA

CONNECTOR B CAN, INPUTS 1-6, OUTPUTS 10-11 HIGH SIDE



Deutsch DT15-12PB

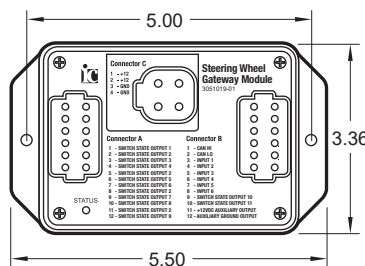
| Terminal | Description |
|----------|-----------------------|
| 1 | SWITCH STATE OUTPUT 1 |
| 2 | SWITCH STATE OUTPUT 2 |
| 3 | SWITCH STATE OUTPUT 3 |
| 4 | SWITCH STATE OUTPUT 4 |
| 5 | SWITCH STATE OUTPUT 2 |
| 6 | SWITCH STATE OUTPUT 5 |
| 7 | SWITCH STATE OUTPUT 6 |
| 8 | SWITCH STATE OUTPUT 2 |
| 9 | SWITCH STATE OUTPUT 7 |
| 10 | SWITCH STATE OUTPUT 8 |
| 11 | SWITCH STATE OUTPUT 2 |
| 12 | SWITCH STATE OUTPUT 9 |

Mating connector is Deutsch DT06-12SA with W12S wedgelock

| Terminal | Description |
|----------|---------------------|
| 1 | CAN HI |
| 2 | CAN LO |
| 3 | INPUT 1 |
| 4 | INPUT 2 |
| 5 | INPUT 3 |
| 6 | INPUT 4 |
| 7 | INPUT 5 |
| 8 | INPUT 6 |
| 9 | SW. STATE OUTPUT 10 |
| 10 | SW. STATE OUTPUT 11 |
| 11 | +12VDC AUX.OUTPUT |
| 12 | AUX.GROUND OUTPUT |

Mating connector is Deutsch DT06-12SB with W12S wedgelock

DIMENSIONS



DOC.7000020 REV.A

CONNECTOR C POWER INPUT



Deutsch DTP15-4P

| Terminal | Description |
|----------|--|
| 1 | +12VDC POWER INPUT FOR CONTROL AND OUTPUTS 1-9 |
| 2 | +12VDC POWER INPUT FOR OUTPUTS 10-11 |
| 3 | GROUND INPUT |
| 4 | GROUND INPUT |

Mating connector is Deutsch DTP06-4S with WP-4S wedgelock