

# HDVCM-01

# Single Channel 12V 70 Amp Latching Solid State Switch



## Key Features

- **Low Power Consumption:** If the output is not active (IN1 & IN2 at GND, IN3 is +12Vdc with No Transitions) current draw is 6mA.
- **Control:** Provides precise control for a +12V 70 Amp feed, allowing seamless switching of loads.
- **Versatility:** Equipped with a microprocessor, enabling the controller to perform various functions based on customer-specified parameters.
- **Comprehensive Functionality Family Optional Configurations:** Optionally offers voltage monitoring, current monitoring, low voltage disconnect, and efficient solid-state contactor control, providing a wide range of optional control options - Contact InPower.
- **Command Interface:** User-friendly control interface via a 6 Pin Deutsch connector ensuring easy and secure connectivity.
- **Customizable Configuration:** InPower's expert team can assist customers in selecting the appropriate configuration ensuring the best fit for your requirements.

## Technical Description

InPower's HDVCM-01 is single Channel 12V 70 Amp Solid State Latching Switches are designed to offer precise control of a +12V 70 Amp feed, allowing seamless switching of loads. This versatile controller is equipped with a microprocessor, enabling it to perform various programable functions based on customer-specified parameters.

The HDVCM-01 has 3 inputs and 1 Output (one 70Amp 12V channel) where transitions on the IN Control Inputs affect the Output. IN1 and IN3 Control Output 1, and IN2 Controls IN1

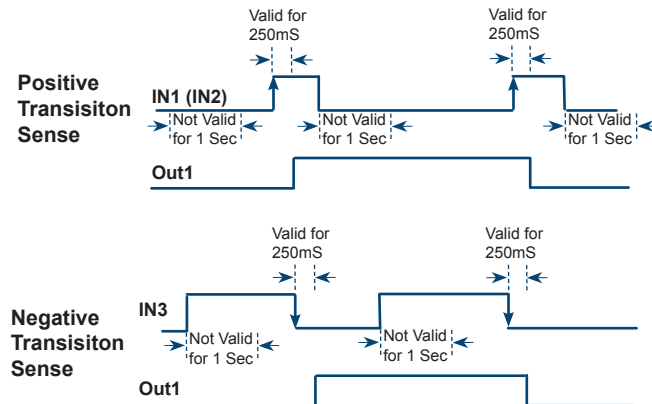
"↑+12" means Transition to 12V will trigger change (IN1, IN2)

"↓GND" means Transition to GND will trigger change (IN3)

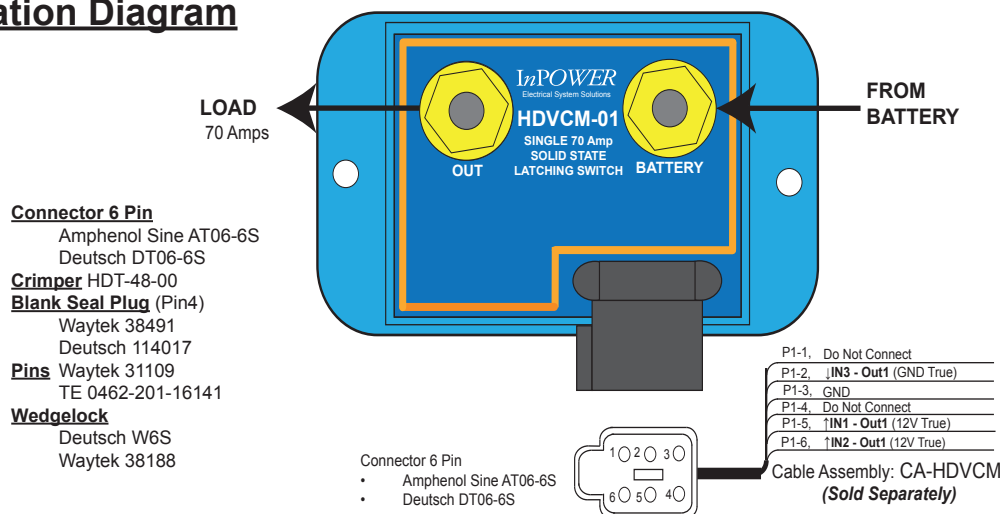
It should be noted that time transition level must be valid for at least 250ms for the transition on IN1, IN2, or IN3 to be recognized.

Additionally, the Input must **not be valid for at least 1 second** before a new transition is recognized.

To ensure that our customers find the most suitable configuration for their specific application, we encourage you to get in touch with InPower. Our expert team will assist you in selecting the appropriate configuration to meet your requirements. Simply reach out to us to request the desired configuration and receive personalized support. [sales@inpowerllc.com](mailto:sales@inpowerllc.com)



## Integration Diagram



# HDVCM-01

## Single Channel 12V 70 Amp Latching Solid State Switch

### Specifications

#### Interface and Control

Battery - Fused Power from the **BATTERY** (J1)

Pin 1 - No Connection

Pin 2 - IN3 Control Neg ( $\downarrow$ GND) Interface

Pin 3 - Ground

Pin 4 - No Connection

Pin 5 - IN1 Control Pos ( $\uparrow$ +12V) Interface

Pin 6 - IN2 Control Pos ( $\uparrow$ +12V) Interface

#### Output Specifications

Output Drive: 70 amps at 12Vdc

12V Switched Output: **OUT** (J2)

#### Input Timing Requirements:

**Transition Valid Time** needs to be a minimum of 250ms for any of the Inputs to be recognized.

**Time between Transitions:** The input must be FALSE for at least 1 second prior to a new transition to be recognized.

### Ordering Guide-Related

Model	Configuration	Data Sheet
HDVCM-01	12V 70 Amp Latching Solid State Switch	PDS-273
Other Options Available on Request		

#### Power Rating

70 Amps Per channel at 185°F (85°C) \*

80 Amp Trip after 5 Sec and Latches OFF \*

140 Amp Surge Trip after 500ms and Latches OFF \*

\* All Ratings Mounted on a 12x12in, unpainted, Aluminum plate Latched OFF Outputs require Manual Restart

• Turn OFF, then Turn ON again

#### Mechanical Specifications

Dimensions (Inches): 3.4 L x 1.88 W x 1.12 H

Torque Power Nuts: 4 Ft/Lbs Min, 5.5 Ft/Lbs

Operating Temp: -40°F to 185°F Max

Mounting Screws: Zinc Self Drilling #10 (10-16 Hex Washer Head)

### Mechanical Drawing

