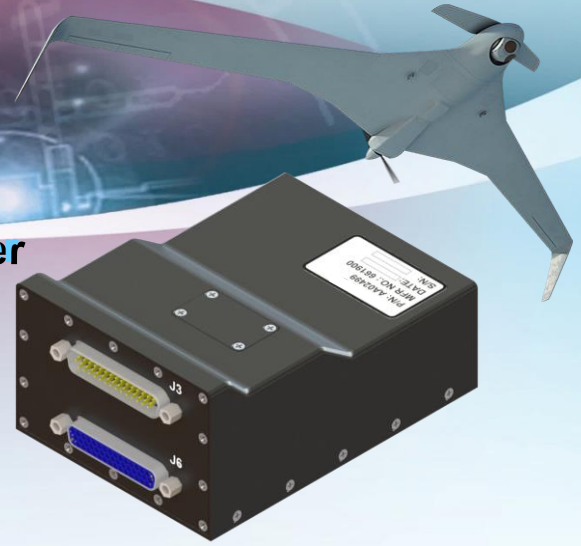




M²C (Micro Military Computer)

SWaP (Small Weight and Power) Computer for Military & Airborne Application

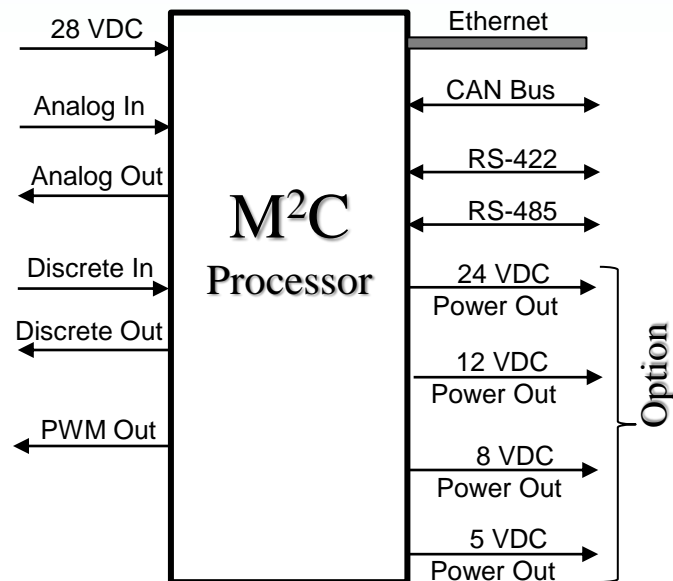


- *Miniature computer*
- *Small Weight and Small Power consumption*
- *MIL-STD-801G Compliant*
- *Designed to support civil certified applications*
- *Real-Time I/O processing*
- *Cyber Protection Provisions (no use of standard Operating System)*
- *Optional power control and power monitor function*
- *Best fit for UAVs (UAV Flight Control and Power Distribution)*

Astronautics' M²C processor was specially designed for airborne and military I/O processing in a very-small, micro enclosure, that is MIL-STD-810 qualified, and civil certification ready solution.

The M²C processor is running on a bare metal hardware, without any standard operating system. It fits secured operation requirements, and the bare-metal software application allows the M²C to be robust and better protected against cyber penetrations.

The M²C processor also provides optional power control and power monitor for several inputs, and different DC power levels (24VDC, 12VDC, 8VDC, 5VDC). Up to 500 Watts power output is supported.



Astronautics' M²C features include :

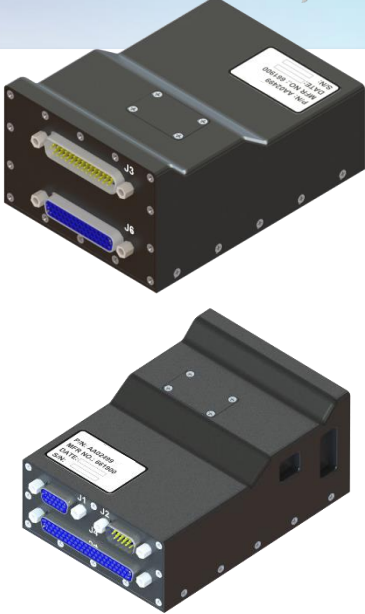
- Wide variety of I/O interfaces (Communication channels, analog, discretes etc.)
- Voltage & current monitoring
- Supports Ethernet, & CAN Bus communication channels
- Power distribution; Power Output
- Power output current limit (eFUSE circuit), with retry possible after 100 ms
- Build In Test (BIT)



M²C (Micro Military Computer)

SWaP solution * UAV Total Solution (Flight-Control & Power Distribution)



CPU	STM32H753XIH6	
Interface Channels	Ethernet (10/100), CAN-Bus, RS-422, RS-485	
Analog Input Interface	0-90 VDC (1), 0-5VDC (3)	
Discrete Input Interface	10 (GND/Open)	
Analog Output Interface	1	
Discrete Output Interface	4 (GND/Open)	
PWM Output	1 (Engine control or other use)	
Power Out Interface	24 VDC; 12 VDC; 8 VDC ; 5 VDC	
Power	28 VDC, 10 Watts (separate external power and Battery power); up to 500 Watt if all power control outputs are in use	
Physical Dimensions	119 mm (W) x 67 mm (H) x 115 mm (D) ; Installation via 4 self-locking Heli coils	
Connectors	Five (5) Connectors : D-Sub 15P; D-Sub 15S; D-Sub 44S; D-Sub 62P; D-Sub 44P	
Weight	670 gram	
Environment	MIL-STD-810G for Vibration, shock, humidity, salt/fog, solar radiation, dust etc.	
Temperature	Operating: -20°C to +55°C	
EMC	MIL-STD-461E	
Reliability	23,400 Hours MTBF (Per MIL-HDBK-217 @ 40°C)	