



# GENERAL MICRO SYSTEMS, INC.

## RUGGED COTS ROUTERS / SWITCHES

### ROUTERS/SWITCHES

General Micro Systems' rugged routers and switches offer the most cost effective, and ultra-high-density network products on the market. GMS' routers / switches are available in several different types of packaging for a variety of applications and industries. They can be fully integrated within a GMS small form factor computer system, may operate as stand-alone, or can be packaged for rack mount applications. Fully sealed and conduction cooled, these products employ MIL-style connectors to provide a rugged router / switch solution that can be deployed in the harshest environments.

Designed to meet the highest MIL standards, GMS' routers/switches provide both hardware and software solutions by utilizing the latest technologies and are fully customizable by the user to provide the highest functionality, as well as increased security through intelligent frame processing.

Other unique advantages of GMS' rugged routers/switches are the available power options. Although some of these products may operate from standard 110VAC, they may also operate from "dirty" vehicle power of 28VDC via an integrated MIL-STD-1275 power supply. This MIL-STD-1275 power allows GMS' products to operate in vehicles without the use of power inverters, which degrade power efficiency and add significant weight to the overall system.

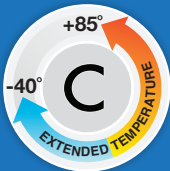
Product	Switch/Router	GigE Ports	10GigE Ports	Embedded Intel® CPU	PoE
VPX-SW (6U)	Managed Switch (L2/L3)	20	2 (Fiber)	None	Yes
S0302-SW	Intelligent Managed Switch (L2/L3)	Up to 17	1	Xeon®	No
SB1102-SW	Intelligent Managed Switch (L2/L3)	12	0	Core™ i7	Yes
SB1102-RT	Intelligent Router	10	2	Core™ i7	No
PMC	Unmanaged Switch / Managed Switch (L2/L3)	8	0	None	No
OCTOPUS	Managed Switch (L2/L3)	24	2	None	No



**RUGGED COTS C<sup>4</sup>ISR SYSTEMS SINCE 1979**

(800) 307-4863 | [www.gms4sbc.com](http://www.gms4sbc.com)

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### ABOUT GMS

Since its inception in 1979, General Micro Systems, Inc. (GMS) has been true to its Mission Statement:

"To Become the World's Leading Technology **Independent Supplier** of Computing Engines, while Providing the **Best Price/Performance**, Quality and Customer Support, Demanded by Our Current and Our Future Customers."

In its 36th year in the embedded computing market, GMS is the oldest supplier of embedded computers in the world. GMS designs and manufactures from the ground up rugged Single Board Computers (SBCs), Small Form Factor systems, smart displays, routers and switches and sealed 1U and 2U rack mount servers. In addition, GMS has been registered and certified to internationally recognized ISO 9001:2008 since 1999. With our growing involvement in military and aerospace programs, our quality system exemplifies the highest standard of AS-9100C.

GMS will always strive to provide customers with the solutions they need to stay ahead of their competition - at the lowest possible price without compromising quality or customer service!

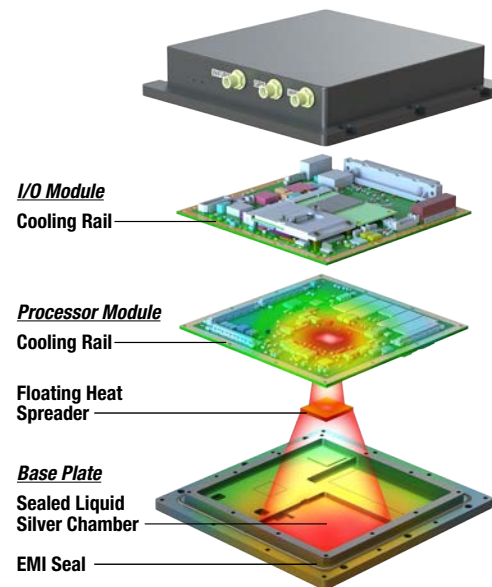
### RUGGEDCOOL™ TECHNOLOGY

All General Micro Systems' products are equipped with GMS' patent pending RuggedCool™ technology, which is the only method that allows systems using Intel-based CPUs with a TjMax of 105°C to operate in a -40°C to +85°C environment at full operational load - without throttling the CPU!

Instead of using thermal gap pads to conduct heat from the CPU to the system's interface to the cold plate, like all other rugged computer system manufacturers, GMS uses RuggedCool™, which employs a corrugated alloy slug with an extremely low thermal resistance to act as a heat spreader at the processor die. Once the heat is spread, a liquid silver compound in a sealed chamber is used to transfer the heat from the spreader to the system's enclosure. This approach yields a temperature delta of less than 10°C from the CPU core to the cold plate and increases shock and vibe resistance.



GMS Headquarters  
Rancho Cucamonga, CA



### "TIGER" S0302-SW

#### Rugged, Fully Sealed Server with 14-Port Intelligent Switch

- 2.4GHz Intel® Xeon® Ivy Bridge-EP CPU with 10 cores
- Fully managed Layer II switch with Layer III features
- 12 Gigabit and two 10Gigabit Ethernet ports
- Very low latency, VLAN support, QoS/differentiated services



### "MALLARD" SB1102-SW

#### Rugged System with Embedded 12-Port Intelligent Switch

- Up to 2.7GHz Intel® Quad Core™ i7 Broadwell processor
- Twelve GigE ports with optional Power over Ethernet (PoE)
- Web GUI and SNMP management interfaces
- Layer III software routing functions with customizable rules



### "RAVEN" SB1102-RT

#### Rugged, Small, 12-Port Intelligent Router System

- Up to 2.7GHz Intel® Quad Core™ i7 Broadwell processor
- Layer III software routing functions with customizable rules
- Two 10GigE and Ten GigE ports with TCP/IP Offloading Engine
- One GigE port for management



### "OCTOPUS"

#### Rugged, Fully Sealed, 26-Port Ethernet Switch

- 24 Gigabit Ethernet ports and two 10Gigabit Ethernet ports
- Fully managed Layer II switch with Layer III features
- Very low latency, VLAN support, QoS/differentiated services
- Security features for authentication and authorization



For full product listing, please visit [gms4sbc.com/products](http://gms4sbc.com/products)

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