

# RAD-Pluto

## 5-Port Automotive Ethernet Switch (100BASE-T1)

Intrepid's RAD-Pluto is the first in a family of Automotive Ethernet switches designed specifically for bench and vehicle network development. This Layer 2 switch is configurable with up to 4x 100BASE-T1 ports, a 1000BASE-T port, and a GigE/USB bridge.

The rugged package also integrates 2x CAN FD and 1x LIN channels to interface with the rest of the vehicle. All of these network interfaces are combined with an embedded processor to execute real-time Function Block scripts and C Code applications. This functionality provides the versatility needed to meet the challenges of today and tomorrow.

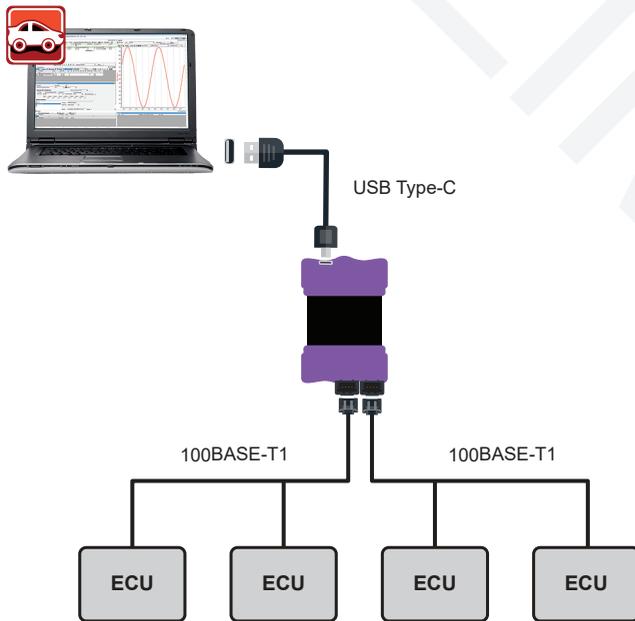


### Features

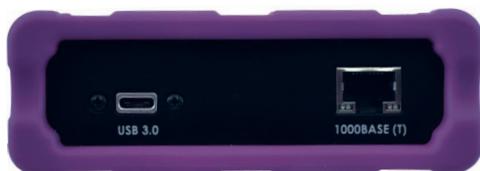
- IEEE 802.1Q tag support with 4096 VLANs
- Frame mirroring and VLAN tagging support for advanced debugging and monitoring
- 8x Dual purpose LEDs for network status and device configuration
- Rugged aluminum case with shock-absorbing boots
- Flexible power options (DB9/USB-C/Barrel-jack)
- Field-upgradeable flash firmware

### Network Specifications

- Ethernet ports:
  - 4x 100BASE-T1 ports
  - 1x 1000BASE-T ports
- 2x CAN FD channels with programmable termination
- 1x LIN channel



*RAD-Pluto connected to four ECUs.*



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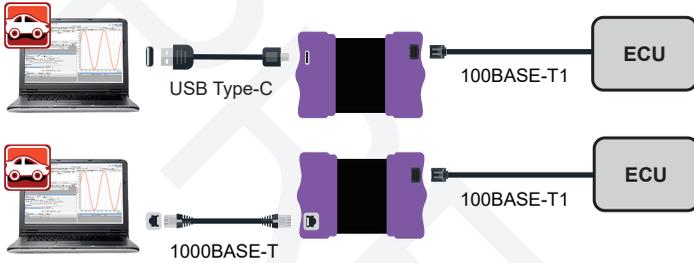


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# RAD-Pluto

## Media Converter

Having 3 different Ethernet interfaces connected to the RAD-Pluto's Layer 2 switch makes it an effective media converter to your PC.

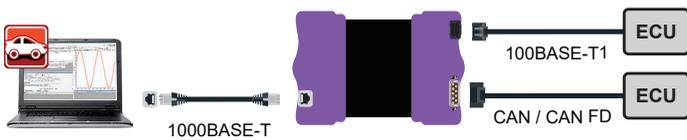


Using the RAD-Pluto as a media converter

## Gateway Applications

In addition to providing a network interface to your PC, the embedded processor in the RAD-Pluto can be programmed to run real-time applications such as network gateways.

Applications can be programmed in Vehicle Spy's Function Blocks or in C Code which is easily compiled to run on the embedded processor.



Using the RAD-Pluto as a Gateway between CAN / CAN FD and Ethernet

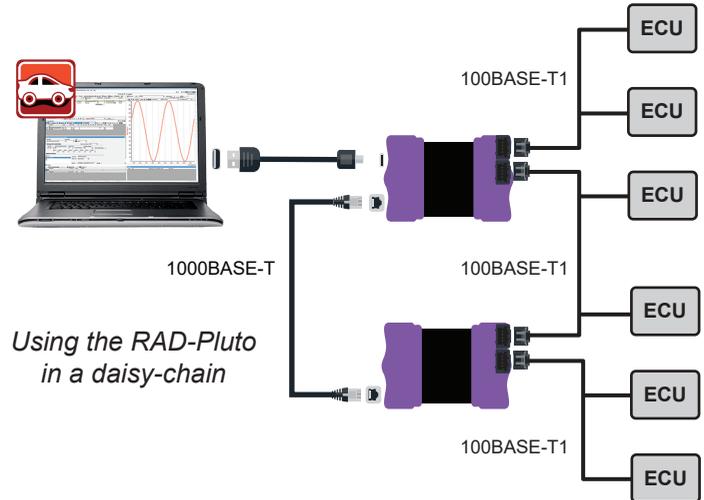
## Ordering Information

Part Number	Description
RAD-PLUTO	RAD-PLUTO Device

Specifications subject to change; please contact Intrepid for the latest information. All trademarks are the property of their respective owners.

## Daisy Chaining

With its two GigE interfaces, the RAD-Pluto easily expands a 100BASE-T1 network in a daisy-chain.



Using the RAD-Pluto in a daisy-chain

## Device Specifications:

- Power supply: 4.5V - 40V or USB type C connection
- Temperature range: -40°C to 85°C
- One-year limited warranty
- Dimensions: 13.67cm x 11.13cm x 3.96cm (5.38" x 4.38" x 1.56")

## 9-Pin Connector

1	LIN
2	CAN1_L
3	GND
4	CAN2_L
5	GND
6	GND
7	CAN1_H
8	CAN2_H
9	VBATT

Rev. 20200616



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