

## RELY-TRAF-GEN Traffic Generator

With the definition of new standards like HSR/PRP or IEEE 802.1CB for TSN networks, that guarantee "zero-packet-loss" or "zero-recovery-time" redundancy in the transmission of traffic, networks in critical sectors are evolving to Ethernet, as the technology that can offer them high bandwidth and interoperability.

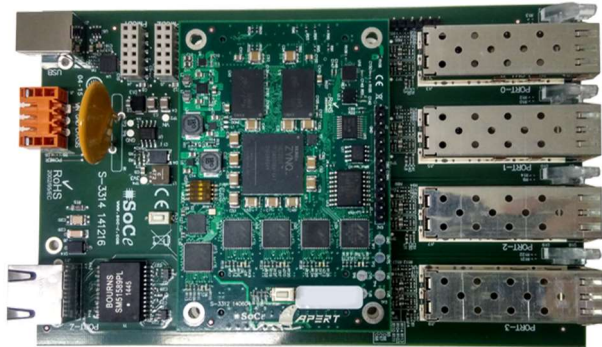
However, these sectors demand some special requirements in the transmission of critical data (control data), that need to be ensured even under congestion scenarios. Those requirements

are low latency and low jitter.

As a first step in this evolution, companies are implementing testbeds for validating the suitability of these technologies for their applications. In order to have a complete setup, a device capable to generate congestion traffic becomes necessary.

RELY-TRAF-GEN has been designed to cover this market's demand. With an FPGA based design capable to generate high throughput data, it can transmit up to 3 Gbps traffic through its Ethernet ports.

## Specifications



### Communications

- 3 x SFP 10/100/1000Base-TX Ethernet copper or 100Base-FX/1000Base-X fibre Traffic Generation Ports.
- 1 x SFP 10/100/1000Base-TX Ethernet copper or 100Base-FX/1000Base-X fibre Expansion Port.
- 1 x 10/100/1000Base-TX Ethernet copper Service Port.
- 1 x USB Console Serial Port

### Processing capabilities

- 3x hardware (FPGA) Frame Generator engines connected to Port-0, Port-1 and Port-2.
- Up-to 3Gbps real throughput
- Traffic shaping based on:
  - » Source MAC Address
  - » Destination MAC Address
  - » Frame Size
  - » Ethertype
  - » VLAN configuration:
    - VLAN encapsulation
    - VLAN priority
    - VLAN ID

- » Test duration
- » Transmission rate in packet per second
- » Transmission rate in mbit per second.
- » Transmission rate in percentage units.

### Rugged devices

- Fan-less design
- Power Supply: 6VDC to 30 VDC
- Operating temperature: -40°C to +70°C
- Storage temperature: -40°C to +85°C

### Configuration and Management

- Dedicated Ethernet service port
- SSH