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## GPEN 21

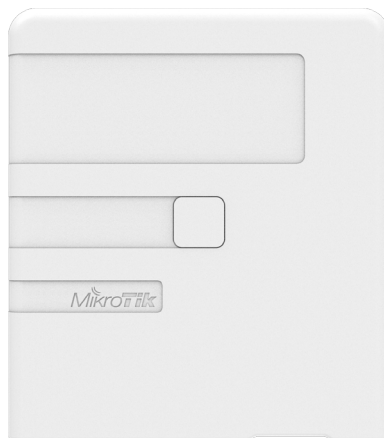
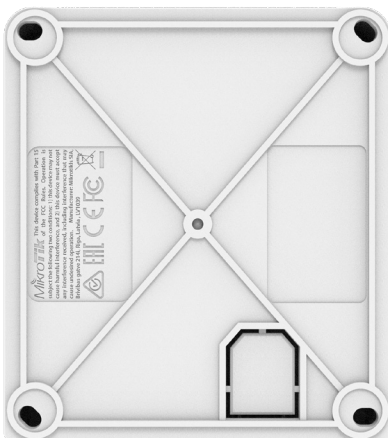
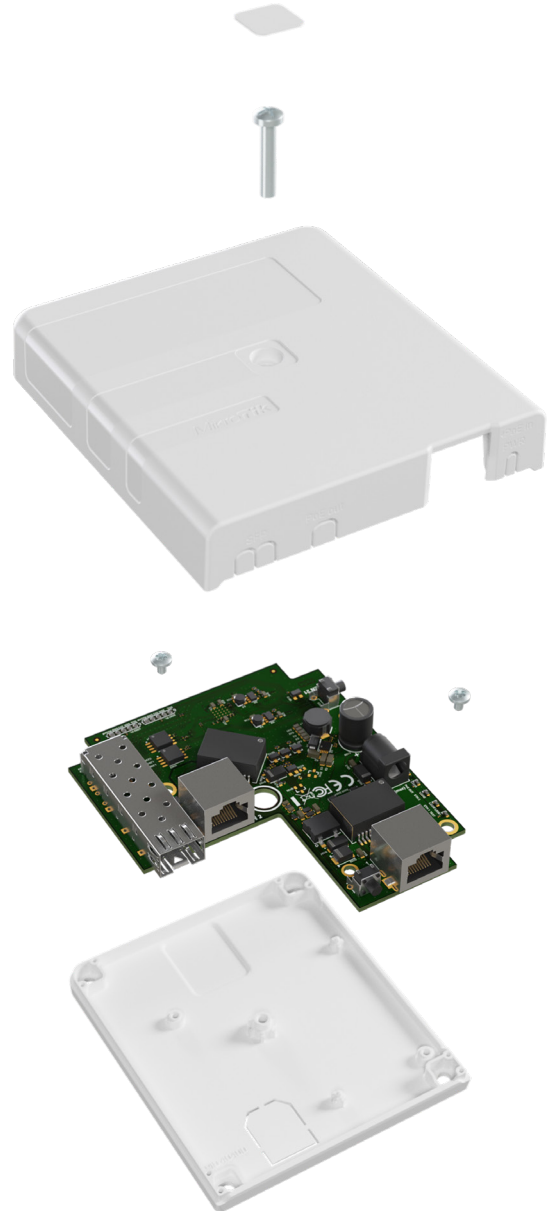
Smart power injector that serves as an advanced software controlled repeater

The GPEN21 is a smart power injector that serves as an advanced software controlled repeater. Not only can it power your uplink devices via PoE, it can also provide a range of useful software features:

- Interface management and monitoring
- GPEN link fault detection
- VLAN support
- SNMP reporting
- Basic traffic shaping

GPEN21 has an Ethernet and an SFP port for fiber connectivity. These ports can be used for simultaneous external connections, but not for cross-port communication. The GPEN21 device can provide PoE to the provider (which uses our GPeR and/or netPower products).

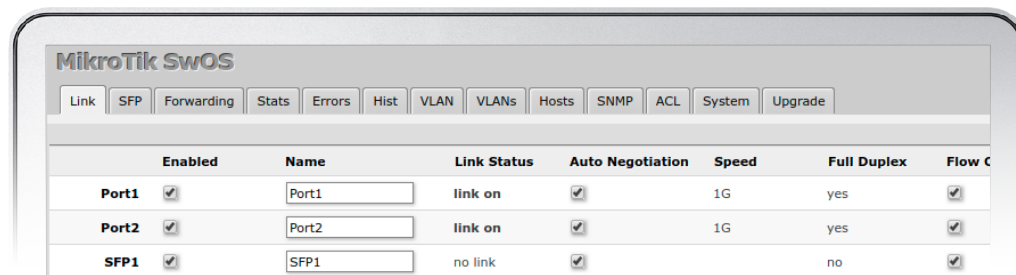
The GPEN unit can be securely attached to a wall or the communications cabinet. The Ethernet cable can be routed either directly through its bottom cable opening or into the wall, as preferred.



*It also has a designated space for an ISP sticker on the front. Sticker size: 66 x 25 mm (2,5 x 1 Inches).*

## GPEN21 software provides

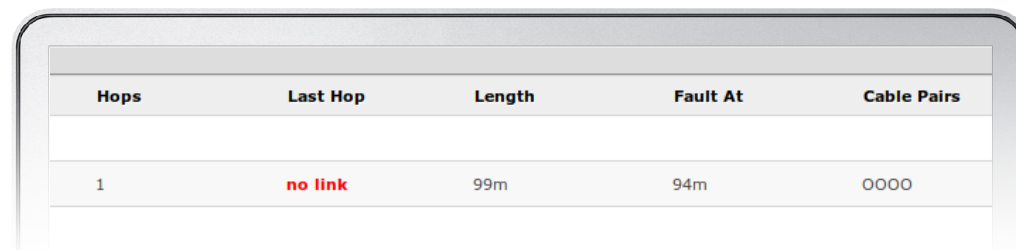
Interface  
management and  
monitoring



The screenshot shows the MikroTik SwOS configuration interface for the Link tab. It displays a table with columns: Enabled, Name, Link Status, Auto Negotiation, Speed, Full Duplex, and Flow Control. The table lists three ports: Port1, Port2, and SFP1.

| Enabled                             | Name  | Link Status | Auto Negotiation                    | Speed | Full Duplex | Flow Control                        |
|-------------------------------------|-------|-------------|-------------------------------------|-------|-------------|-------------------------------------|
| <input checked="" type="checkbox"/> | Port1 | link on     | <input checked="" type="checkbox"/> | 1G    | yes         | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Port2 | link on     | <input checked="" type="checkbox"/> | 1G    | yes         | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | SFP1  | no link     | <input checked="" type="checkbox"/> |       | no          | <input checked="" type="checkbox"/> |

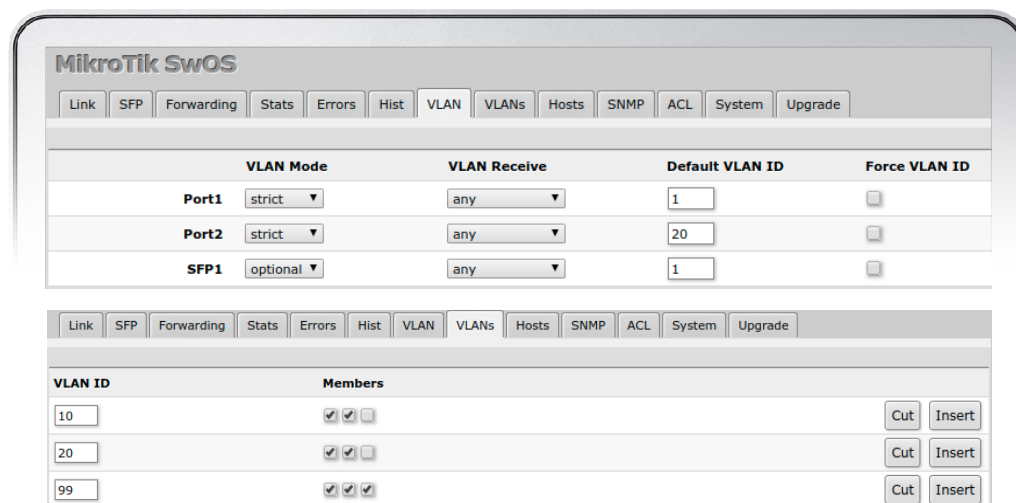
GPEN link fault  
detection



The screenshot shows the MikroTik SwOS configuration interface for the Hops table. It displays a table with columns: Hops, Last Hop, Length, Fault At, and Cable Pairs. The table shows one hop with a 'no link' status.

| Hops | Last Hop | Length | Fault At | Cable Pairs |
|------|----------|--------|----------|-------------|
| 1    | no link  | 99m    | 94m      | 0000        |

VLAN support



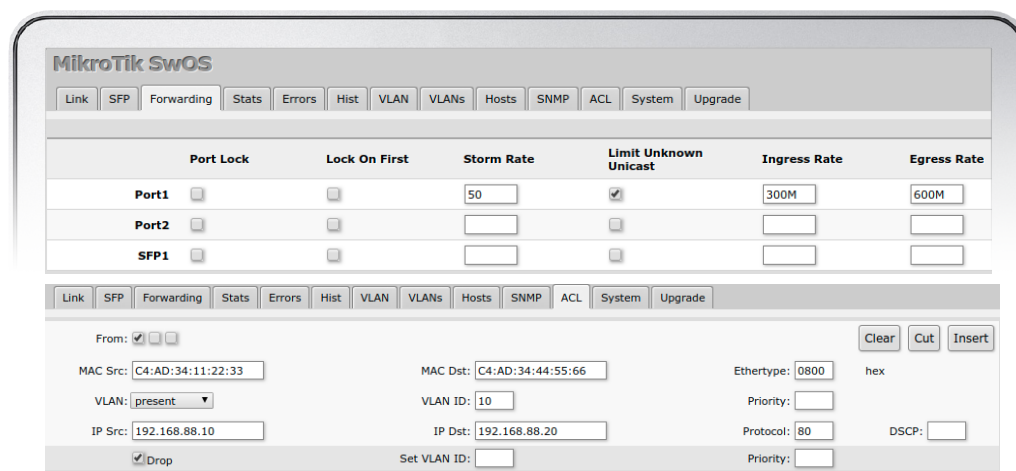
The screenshot shows the MikroTik SwOS configuration interface for the VLAN tab. It displays a table with columns: VLAN Mode, VLAN Receive, Default VLAN ID, and Force VLAN ID. The table lists three ports: Port1, Port2, and SFP1. Below the table is a section for VLAN ID and Members.

| VLAN Mode      | VLAN Receive | Default VLAN ID | Force VLAN ID            |
|----------------|--------------|-----------------|--------------------------|
| Port1: strict  | any          | 1               | <input type="checkbox"/> |
| Port2: strict  | any          | 20              | <input type="checkbox"/> |
| SFP1: optional | any          | 1               | <input type="checkbox"/> |

| VLAN ID | Members                                                                                                     | Cut                                | Insert                                |
|---------|-------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------|
| 10      | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>            | <input type="button" value="Cut"/> | <input type="button" value="Insert"/> |
| 20      | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>            | <input type="button" value="Cut"/> | <input type="button" value="Insert"/> |
| 99      | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> | <input type="button" value="Cut"/> | <input type="button" value="Insert"/> |

Basic traffic  
shaping



The screenshot shows the MikroTik SwOS configuration interface for the Forwarding tab. It displays a table with columns: Port Lock, Lock On First, Storm Rate, Limit Unknown Unicast, Ingress Rate, and Egress Rate. The table lists three ports: Port1, Port2, and SFP1. Below the table is a section for traffic shaping configuration.

| Port Lock                       | Lock On First            | Storm Rate | Limit Unknown Unicast               | Ingress Rate | Egress Rate |
|---------------------------------|--------------------------|------------|-------------------------------------|--------------|-------------|
| Port1: <input type="checkbox"/> | <input type="checkbox"/> | 50         | <input checked="" type="checkbox"/> | 300M         | 600M        |
| Port2: <input type="checkbox"/> | <input type="checkbox"/> |            | <input type="checkbox"/>            |              |             |
| SFP1: <input type="checkbox"/>  | <input type="checkbox"/> |            | <input type="checkbox"/>            |              |             |

From: ☒ ☐ ☐

MAC Src: C4:AD:34:11:22:33 MAC Dst: C4:AD:34:44:55:66 Ethertype: 0800 hex

VLAN: present VLAN ID: 10 Priority: Protocol: 80 DSCP:

IP Src: 192.168.88.10 IP Dst: 192.168.88.20 Priority:

☒ Drop Set VLAN ID:

## Specifications

|                             |                             |
|-----------------------------|-----------------------------|
| Product code                | GPEN21                      |
| Number of 1G Ethernet ports | 2                           |
| Number of 1G SFP ports      | 1                           |
| Number of DC inputs         | 2 (DC jack, PoE-in)         |
| PoE-out                     | Yes, Passive PoE up to 57 V |
| PoE-in                      | 802.3af/at                  |
| Supported input voltage     | 12 - 57 V                   |
| Dimensions                  | 92 x 104 x 24 mm            |
| Operating temperature       | -20°C to +70°C tested       |

## Included parts



Screw kit