



# **Power-over-Ethernet extender**



**Daisy105-MP** is a managed Power-over-Ethernet (PoE) solution for extending ethernet connectivity upto 300meters (with PoE option enabled on user ports) and upto 800meters (with PoE option disabled on user ports). Apart from extending L2 connectivity, the device also extends power on its user ports, well enough to power CPE devices like IP phones and IADs.

## **Key Features**

- Wire-speed switching device
- 2 nos PoE network ports & 3 nos PoE user ports (10/100Base-T)
- Short-circuit protection on all ports
- Power surge protection
- Power Enable / Disable on all ports
- Local DC Power feed option available
- IP64 compliant weather proof enclosure
- Secured data access across user ports
- Management traffic on tagged VLANs
- Upto 5W power per PoE user port
- LITEview NMS software on Linux platform
- Data and power management on all ports
- Periodic update of port status to NMS

### Description

With millions of switched Ethernet ports sold worldwide, PoE has become one of the largest mainstream technologies to deliver power on Ethernet cables. Interest shown in developing this technology has touched new peaks to cover more and more devices, which demand more power than currently supported.

Service Provider Ethernet networks are controlled and managed only up to the last mile active Ethernet switches and media converters. Remote devices typically require a power line also to be distributed and this becomes complex for equipments like WiFi radios and surveillance cameras. Ethernet based access systems demand separate power lines to be extended along with data cables, thus making it expensive and complex to manage and maintain.

Service Providers and cable distributors will benefit from a midspan technology, which could deliver power in the range of 200mA to 1000mA, over two-pairs of spare wires with proper protection and management, to power up legacy appliances, IADs and IP phones. The current standard does not meet high power CPE devices bundled by service providers.

**Daisy105-MP** is a 5-port mid-span PoE managed switch, which carries Ethernet network data and extends switched data on user ports along with DC power. The DC power can be extended beyond 100meters by cascading these units to span up to 300meters, over standard CAT5/CAT5e cabling plants delivering 5W of power to users. The **Daisy105-MP** solution consists of three devices namely, the Power feeder (**PF**) or Power source (**PS**), PoE mid-span switch (**Daisy105-MP**) and the Power splitter (**Daisy SP**).

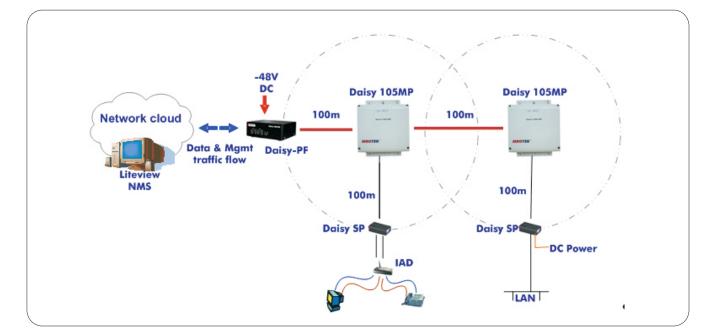
The feeder unit is fed with a regulated DC power at -48Volts. Input power is protected for short circuit and are mixed with the Ethernet data to flow out via PoE ports to an end-to-end distance of upto 100meters.

**Daisy105SP** splitter unit splits the power and data to deliver DC power via a jack and ethernet via RJ45 connector. This unit regulates DC voltages and offers surge protection to the powered device, apart from ensuring exact voltage to the powered devices(PD)

**LITEview** for **Daisy105-MP**, is a Linux based management software which offers configuration, provisioning and monitoring management including support services like DHCP option82.

## Application

Enhanced power carrying capacity and multi-hop connectivity is thus made possible with a proprietary, patent pending implementation of PoE, which allows more current per port, to enable powering of remote appliances like the IAD and IP phones. With **Daisy105-MP** solution, the ethernet coverage can be extended upto 300m.



#### Typical **Daisy105-MP** implementation



## **Technical Information**

- Standards Compliance : IEEE 802.3u, 10/100BASE-T, IEEE802.3x flow control Port based VLANs Management traffic on separate VLAN 144880pps throughput for 64byte frames DHCP client with Option82 support
- 10/100BASE-T port :
  - 2 backbone ports - 3 user ports Shielded RJ-45 Half/Full Duplex support
- Auto MDI-I / MDI-X

  Network Management
  - Linux based Application package Tomcat Webserver, DHCP Server with Option82 support Periodic status update of all devices and ports Event based Alarm pop-ups Backup/Restore database Hierarchical user profiles Configuration and monitoring Detailed device auto-provisioning tool

- Voltage rating: DC Input range : -48V DC
- Power consumption:  $\sim 4W$
- **Operating Temperature :** 0°- 50°C / 32°- 122°F
- MTBF : 100000 hrs
- Humidity : 10% to 90%, non-condensing
   Physical Dimensions :
- 165 x 175 x 33 mm • Enclosure :
- IP64 compliant weather-proof enclosure.
   Wall mountable
- Weight: 400 grams

## Ordering Daisy105-MP

Daisy105MP	5-port, Managed PoE switch/all ports PoE/IP64 compliant enclosure
Daisy105M	5-port, Managed PoE switch/network ports PoE/IP64 compliant enclosure
DaisyPF	Single channel, desktop/wall mountable power feeder/-48V DC
DaisyPF-8	8-channel, 19" rack mountable power feeder/-48V DC
Daisy105-SP/12	48 to 12V/350mA data/power splitter unit with surge protection
LITEview for Daisy	Liteview Network Management Software for Red Hat Linux





#### MRO-TEK Limited Bellary Road, Hebbal Bangalore - 560 024, INDIA Phone : +91-80-23332951 Fax : +91-80-23333415 Email : mrotek@vsnl.com Web: www.mro-tek.com