



1 Gigabit Ethernet MM-wave Link

LOW COST ALTERNATIVE TO FTTH/FTTP

This true 1GE PPC-1000-V 60 GHz link brings low cost alternative to laying multi-wire array fiber for FTTH/FTTP. With PPC-1000-V, gigabit connection to home or to small business premises could be deployed at very short time and for affordable cost. Internet providers, Safe City operators or telecom operators don't need permission from city authorizes to digging roads, nor from electricity company for renting electric masts for cable laying. The link operates under wireless standard 802.11ad for 60 GHz spectrum.

LICENSE-FREE BAND

Radios operating in the license-free 60 GHz band (V-band) have characteristics that make them significantly useful for last mile gigabit connections. Federal Communications Commission (FCC) set aside an unprecedented continuous block of 7 GHz of license exempt spectrum between 57 to 64 GHz. The majority of the globe has done the same at varying points between 57 to 66 GHz.

LOW INTERFERENCE BETWEEN V-BAND LINKS

An important consequence of oxygen absorption is that radiation from one particular 60 GHz radio link is quickly reduced to a level that will not interfere with other 60 GHz links operating in the same location. This reduction enables the ability for more 60 GHz radios to successfully operate within one location.

Partly because of oxygen's absorption characteristics at 60 GHz, various regulators across Asia, Middle East, Europe, and the Americas allow up to 100's of Watts of Equivalent Isotropic Radiated Power (EIRP) for wireless transmissions in V-band. The wide bandwidth and high allowable transmit power enable gigabit or multi-gigabit connections.

PPC-1000-V ADVANTAGES

ELVA-1 PPC-1000-V is outdoor radio, designed for temperatures from -40°C (-40°F) to +70°C (158°F) to operate in different climate zones.

- Operating distance up to 1 km (0.62 mi)
- Up to 1000 Mbps throughput
- Powering by POE (Power over Ethernet) or traditional DC socket.

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PPC-1000-V PHOTOS



PPC-1000-V SPECIFICATION

Model	PPC-1000-V
Max Throughput	up to 1 Gbps 802.11ad
Modulation	Adaptive to weather
Adaptive rate	Hitless adaptive bandwidth
Max Distance at max throughput at clear sky	up to 1.0 km (0.62 mile)
Management	Router OS
Ethernet Interface	1x 1000/100/10Base-Tx

Antenna

Antenna Type	30 cm offset dish
Antenna weight	5 kg with mount

Power / Environment

Transceiver Power Consumption	5 W
Power DC Voltage	12 to 57 Volts DC through POE adapter or traditional DC socket
Operational Temperature	-40°C to +70°C / -40°F to 158°F
Humidity	All weather

Physical dimensions of radio unit

Outdoor unit size w/o antenna	185 x 85 x 30 mm
Weight (ODU w/o antenna)	1 kg max