



## Free space optics model EL-1GL

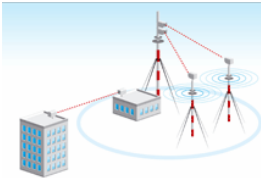
This model can transmit data with speed 1 Gbit/s at distances up to 5100 m.

- Autotracking
- Narrow beams of emission - secure data
- Special interface optimized for transmission in the atmosphere
- Double channel technology with backup supply
- Built-in service channel
- Built-in telescope for easy targeting
- Built-in defroster
- IP monitoring
- SNMP alerts
- Active link loss forwarding (ALLF) system

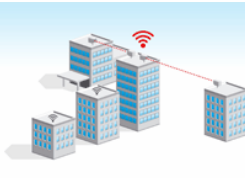


## Aplication

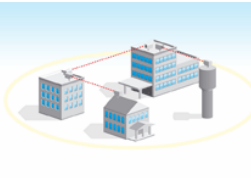
### Mobile communication



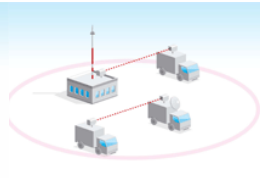
### Security systems



### Municipal buildings



### Temporary channels



## Main Features

**Technology of the double channel** - It provides automatically operated switching to the reserve channel and back to the optical channel. Switching time is to 0.5 sec.

**Autotracking** - Fast and precise automatic guidance of one transmit-receive module to another during the wireless communication

**Improved communication reliability** – The doubled operating wavelength of the main information channel (up to 1550 nm) is shifted in the middle infrared area. That guarantees smaller attenuation in the atmosphere and increases reliability of communication line

**Aerodynamic shielding** – It protects optical head from overheat, prevents receiving and transmitting lens from being clogged with snow. It is an effective barrier from contamination with smog or dust



## EL-1GL specification

Base interfaces	2x 10/100/1000 Base-TS, 1x 1000 Base-SX (SFP)
Additional interfaces	From 2 to 63 E1 channels
Wavelength, nm	1550
Bandwidth of optical channel	1250 Mbps full duplex
Fade margin at a distance of 1km, dB	44
Latency time of optical channel, ms	< 0.125
Link distances, m	5100
Method of keeping direction	autotracking system
Dynamic range of angle deviation processing (position keeping angle), mrad (grade)	65(3.7)
Speed of automatic adjustment mrad/s	8
Latency time of backup channel, ms	up to 350
Power supply, V	AC 90-260 DC 48 +- 15%
Power consumption, W	37 (67 with heated optics)
Category temperature range of ODU, Celsius degree	minus 40 to plus 50
Dimensions of optical unit	480x300x285
Dimensions of interface unit	450x200x44 (19" 1U)
Dimensions of radio unit	200x200x70
Weight of optical unit	6
Weight of interface unit	2
Weight of radio unit	1
Cable length, m	<100
Management, monitoring	UDP (firmware)