



Description	InfiMAN Evolution E5-ST28, 5 GHz subscriber terminal, net throughput up to 670 Mbps, integrated dual-pol antenna, 28 dBi, 5x5 deg
Net throughput	up to 670 Mbps
Recommended distances	25+ km
Radio technology	MIMO 2x2 (OFDM 64/128)
Modulation coding schemes	from BPSK 1/2 to QAM256 5/6
Transmit power	up to 25 dBm
Receiver sensitivity	down to -90 dBm
Frequency range	4900-6050 MHz
Channel width	20, 40, 80 MHz
Center frequency adjustment step	125 kHz
Duplex scheme	TDD
Antenna	28 dBi
Wired Interfaces	1x GigabitEthernet (RJ45)



Consumption	up to 15 W					
Power options	90-240 VAC ~ @ 50/60 Hz, ±4356 VDC					
Outdoor Unit (ODU)	600x600x68 mm, 5.8 kg					
Part Number Options	Prefix <i>E</i>	Freq. Band	Ant. 28	Capacity  20 50 670		
Part Number Example	E5-ST28/06600 50					
Packing List	<ul> <li>Outdoor unit E5-ST28 - 1 pcs.</li> <li>Power Supply IDU-CPE-G(24W) - 1 pcs.</li> <li>Power Cord - 1 pcs.</li> <li>Cable Gland - 1 pcs.</li> <li>Standard RJ-45 connector - 1 pcs.</li> <li>Shielded RJ-45 connector - 1 pcs.</li> <li>RJ-45 Plug Cap - 1 pcs.</li> <li>MONT-KIT-85S Mounting kit - 1 pcs.</li> <li>Quick Start Guide - 1 pcs.</li> </ul>					



## PRODUCT DATASHEET

## InfiMAN Evolution E5-ST28

### **Features**

### **RADIO**

- Voice/RTP Aware Superpacketing
- DFS
- Automatic Bitrate Control
- Automatic Transmit Power Control
- Automatic Distance Learning
- Channel Time Adjustment
- Spectrum Analyzer mode
- Channel testing tools

### **NETWORKING**

- Ethernet-over-IP and IP-over-IP tunneling
- ARP protocol support
- MAC/IP filtering
- Full-fledged 2nd layer switch
- RIPv2 / OSPFv2 /static routing
- L2/L3 Firewall
- NAT (multipool, H.323-aware)
- DHCP client/server/relay

### **MANAGEMENT FEATURES**

- Various Management Protocols: HTTP, HTTPS, SSH, Telnet, SNMP v1/2c/3 (MIB-II and proprietary MIBs)
- Graphical User Interface
- LED Indication: power status, wireless and wired link status, signal level
- Antenna alignment tool
- Automatic software update
- Online monitoring with proprietary EMS InfiMONITOR.

### **QUALITY-OF-SERVICE**

- 17 priority queues
- ▶ IEEE 802.1p support
- IP TOS / DiffServ support
- Full voice support
- Traffic limiting (absolute, relative, mixed)
- Traffic redirection



### **Features**

### **ENVIRONMENTAL**

#### Outdoor Units:

- operating temperature range -40..+60 °C, (can be extended to -55..+60 °C, models with "t" index in PN), 100% humidity, condensing
- IP66/IP67 compliant water and dust protection
- wind load: 200 kph, survival

### Indoor Unit:

- 0..+40 °C, 95% humidity, non-condensing

### **SECURITY FEATURES**

- Storm/flood protection
- Password protection
- Secure command-line access via SSH protocol

#### MAC

- Adaptive TDMA air protocol:
  - Dynamic and fixed air frame duration
  - Subscriber activity aware scheduling
  - Permanent channel testing
- Pseudo-radio interface:
  - unique InfiNet Wireless feature to join InfiNet networks via 3rd party equipment
- Automatic over-the-air firmware upgrade

### STANDARD COMPLIANCE

- Radio
  - ETSI EN 301 893 v.2.1.1
  - ETSI EN 302 502 v.2.1.3
  - FCC Part 15.407
- **▶** EMC
  - ETSI EN 301 489-1 v.2.2.3
  - ETSI EN 301 489-17 v.3.2.4
  - FCC Part 15 Class B
- Safety
  - EN 62368-1:2014+A11:2017
  - EN60950-22:2017
  - EN62311:2008
- ▶ RoHS (pending)
  - EN IEC 63000:2018





# Radiation diagram









