



EDS8012 EDS8015 EDS8022 EDS8025

Wireless IP **Surveillance System**

2.4 GHz and 5 GHz Extreme Long-Range Wireless Surveillance

EnGenius Wireless IP Surveillance System provides long-range point-to-point and point-to-multipoint surveillance coverage for expansive venues, transmitting streaming video over great distances – up to 5-miles point-to-point at high speeds. The system is ideal for monitoring large indoor and outdoor environments such as parking lots, shopping malls, warehouses and ranches, even in harsh weather.

Available in both Wireless N300 speeds, the 2.4 GHz IP Surveillance System (EDS8012 & EDS8022) or the 5 GHz IP Surveillance System (EDS8015 & EDS8025), is designed to withstand extreme environmental conditions and features certified IP-rated housing.



Features

- > High-gain antennas extend wireless network to 5-miles point-to-point
- > 802.11n wireless speeds to 300 Mbps; to 90 Mbps at ½ mile for fast video streaming
- > Wide angle 1 & 2MP lens captures high-res images over broader areas
- Removable IRC filter & built-in IR LEDs for monitoring in low light or total darkness up to 82-ft/25m
- > Access Point's 360-degree, 3-axis pivoting arm locks for precise alignment
- > Point-to-point & point-to-multipoint surveillance over large distances
- > Up to 400mW transmit power sends wireless signals long-range
- > IP-rated waterproof & dustproof casing withstands harsh environments
- PoE support & included injector extends power to unwired areas up to 328-ft/100m
- > Flexible deployment modes include AP, Client Bridge or WDS Bridge
- > Manage lighting & digitally adjust exposure with WDR Technology
- > H.264 Video provides up to 1920x1080 HD viewing performance with less bandwidth
- Camera supports ONVIF standard for easy integration with 3rd party hardware & software
- Includes free 16-channel Video Management Software with live monitoring, record, 30 fps playback & quick search
- Integrates with 3rd party digital alarms, sensors or other electronic devices for real-time event warnings
- > Receive alarm alerts directly to your mobile device for rapid response
- > Control, monitor & configure AP with EZ Controller™ Software

Wireless IP Surveillance System is ideal for deployment in these venues:

- > College Campuses
- > Corporate Campuses
- > Shopping Malls
- > Resort Properties

- > Parks & Campgrounds
- > Military Bases
- > Warehouse Operations
- > Stadiums & Arenas

- > Medical Centers
- > Luxury Homes & Estates
- > Farms & Ranches

Eyes on Everywhere

Security concerns top the agenda of many organizations today. But not all surveillance challenges fit into a neat little box. Campuses, civic centers, shopping complexes plus indoor and outdoor arenas can be crowded with buildings and other obstructions, and may also be saturated with a spectrum of RF signals.

EnGenius Wireless IP Surveillance System is specifically designed and engineered to extend the network over great distances and to substantially extend wireless transmissions range, delivering streaming video at stable, robust wireless speeds in challenging point-to-point environments that are often difficult to reach.



Strong Wireless Performance Over Broad Distances

Robust point-to-point and point-to-multipoint 802.11n wireless performance of up to 300 Mbps on both 2.4 GHz (EDS8012 & EDS8022) and the 5 GHz (EDS8015 & EDS8025) frequency band, and 90 Mbps at ½ mile, creates a dependable surveillance network across great distances.

Longer connectivity distances, up to 5-miles can be achieved when two outdoor APs of the same frequency band are paired together in a Point-to-Point (PtP) deployment, aligning their dish-shaped antennas to face each other.

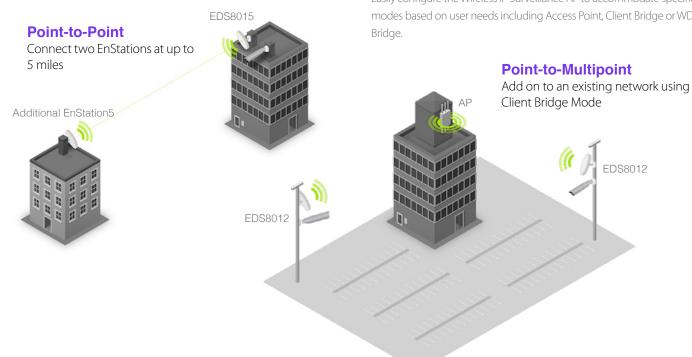
Point-to-Point & Point-to-Multipoint Surveillance

Ideal for overcoming the challenges posed by hard-to-reach installations, those laid out asymmetrically or over wide areas, obstructed by buildings, or congested with heavy RF traffic.

The Wireless IP Surveillance System is an affordable alternative to conventional wired surveillance deployments; this versatile, reliable and highperforming security system is ideal for creating or extending surveillance coverage over long-ranges.

Flexible Deployment Modes Based on Needs

Easily configure the Wireless IP Surveillance AP to accommodate specific modes based on user needs including Access Point, Client Bridge or WDS Bridge.



Powerful Surveillance

Tethering a series of EnGenius 1- or 2-Megapixel Day/Night HD Bullet IP Surveillance Cameras to the AP gives you "eyes on" places you might not otherwise see—no matter how far away, with significantly better results than traditional non-tethered wireless surveillance setups.

The IP Camera's wide angle lens provides 1280×720 (1MP) or 1920×1080 (2MP) HD performance, clarity and versatility needed to monitor even the largest properties.



Constant Vigilance

Removable IRC filter and built-in IR LED illuminators offer clear image quality day or night in low light or total darkness up to 32-ft/10 m (1MP) or 82-ft/25 m (2MP).



Managing varying lighting conditions and adjusting the digital exposure is made easy with Wide Dynamic Range Technology (WDR), providing clear images even in highly backlit environments.



Motion & Alarm Detection Triggers Provide Instant Proof

Motion and alarm-in detection capabilities can be set to alert staff, giving them the irrefutable video evidence needed to initiate a recording of the event or, if necessary, call the authorities.

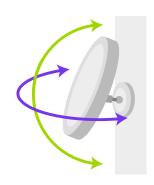
Excellent Performance in Harsh Environments

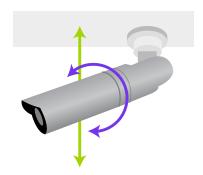
IP-rated waterproof and dustproof casing ensures both the AP (IP55-rated) and IP Camera (IP66-rated) are able to withstand harsh climates as well as indoor industrial environments such as manufacturing plants and warehouses where temperature is a factor.



Adjustable 3-Axis Pivoting

360-Degree, 3-axis pivoting arm on AP locks for precise alignment and includes a pole mounting kit.





IP Camera features 2-axis pivot mechanism with cable management bracket for a clean professional look while securing wiring from the elements.

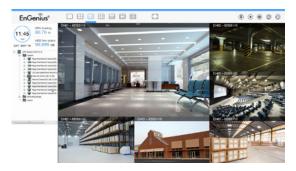
Flexible Power Options with Power-over-Ethernet (PoE) Support

The Wireless IP Surveillance System supports PoE, which allows the AP to be powered via the included proprietary PoE injector and the IP Camera to be powered and connected directly via an Ethernet cable to an 802.3af-capable switch.

PoE is especially useful for deployments where a power outlet may be scarce or unavailable such as in remote parking lots, under the eaves of roofs, or high atop poles.

Monitor, Record & Search with 16-Channel Video Management Software (VMS)

Provide maximum video coverage for even the most far-reaching venues. Monitor up to 16 camera streams in real-time with the included Video Management Software.



- > Optional split-screen camera view
- > Monitor up to 16 cameras simultaneously
- > View live monitoring, record video and playback options
- > Quick search of archived video via time bar



- > At-a-glance floor plan view
- > Visible monitoring coverage for easy deployment
- > Quick view monitor on floor plan with the click of a mouse

Alarm Alerts

Intergrate IP camera with 3rd party digital alarms, sensors or other electronic devices that activate when motion detectors are triggered, serving as an added deterrent to prolonged suspicious activity.

Push Notifications

View, record and receive triggered event alerts directly to your smartphone or tablet for instant notification of events-in-progress with free downloadable App for Android and iOS.



Simplified AP Setup and Maintenance

With EnGenius' EZ Controller™ Software, the AP units that are deployed on rooftops or other difficult to access locations are easily reconfigured to a different operational mode or upgraded remotely without having to manually reconnect to them or re-install them onsite.







Connection to one digital input device



Sensor



Sensor







Example:

Set an event profile to flash an alert light when the active IR sensor is triggered so the camera will send a triggered event alert.

EnGenius Wireless IP Surveillance System









Models	EDS8012	EDS8015	EDS8022	EDS8025
Standards	802.11b/g/n	802.11a/n	802.11b/g/n	802.11a/n
Frequency	2.4 GHz	5 GHz	2.4 GHz	5 GHz
Data Rates	300 Mbps	300 Mbps	300 Mbps	300 Mbps
Radio Chains/Streams	2 x 2	2 x 2	2 x 2	2 x 2
RF Output Power	26 dBm	26 dBm	26 dBm	26 dBm
Ingress Protection (AP/Camera)	55/66	55/66	55/66	55/66
Fast Ethernet (10/100 Mbps)	•	•	•	•
Secondary Ethernet Port	•	•	•	•
Integrated Antennas	13 dBi	19 dBi	13 dBi	19 dBi
Camera	1 MP	1 MP	2 MP	2 MP
IR Illumination	To 32-ft./10m	To 32-ft./10m	To 82-ft./25m	To 82-ft/25m
F.O.V	60° (diagonal)	60° (diagonal)	120° (diagonal)	120° (diagonal)

Technical Specifications Long-Range Wireless Outdoor Access Point/Client Bridge

RF Frequency Band		
EDS8012 / EDS8022 2.4 GHz		
EDS8015 / EDS8025 5 GHz		
Standard		
EDS8012 / EDS8022 IEE 802.11b/g/n		
EDS8015 / EDS8025 IEEE 802.11a/n		
Physical Interface		
AP Device		
2 x 10/100 BASE-T Ethernet Ports		
1 x Port supports 24V Proprietary PoE Input		
1 x Port supports extension of an Internet signal		
1 x Reset Button		
LED Signal		
1 x Power		
1 x LAN 1		
1 x LAN 2		
1 x WLAN		
Antenna		
Internal High-Gain Directional Antenna		
EDS8012 / EDS8022		
2.4 GHz (P1)		

- Average Antenna Gain: 13 dBi

- Azimuth Beam Width: 67° - Elevation Beam-Width: 33°

- Polarization: Linear

- VSWR: 1:2.0

EDS8012 / EDS8022 continued
2.4 GHz (P2)
- Peak Antenna Gain: 13 dBi
- Polarization: Linear
- Horizontal Beam Width: 61°
- Elevation Beam-Width: 35°
- VSWR: 1:2.0
EDS8015 / EDS8025
5 GHz (P1)
- Average Antenna Gain: 19 dBi
- Polarization: Linear
- Azimuth Beam Width: 30°
- Elevation Beam-Width: 18°
- VSWR: 1:2.0
5 GHz (P2)
- Peak Antenna Gain: 19 dBi
- Polarization: Linear
- Horizontal Beam Width: 18°
- Elevation Beam-Width: 30°
- VSWR: 1:2.0
Operation Modes
Access Point
Client Bridge
WDS Bridge
Radio I

EDS8012 / EDS8022 11b/g/n: 2.412-2.472 GHz

EDS8015 / EDS8025 11a/n: 5.180-5.825 GHz

Data Rate	
Up to 300 Mb	pps
Transmit Po	wer
Up to 26 dBn	n
Up to 400 m\	V
Max Power is	limited by regulatory power
Supported F	Radio Technologies
EDS8012 / E	DS8022
802.11b: Dire	ct-Sequence Spread-Spectrum (DSSS)
802.11n: Orth (OFDM)	nological Frequency-Division Multiplexing
802.11n: with	n 5/10/20/40 MHz Channel Width
802.11n: with	n 5/10/20 MHz Channel Width
802.11b/g: w	ith 5/10/20 MHz Channel Width
EDS8015 / E	DS8025
802.11a/n: Oi (OFDM)	rthological Frequency-Division Multiplexing
802.11n with	5/10/20/40 MHz Channel Width
802.11a with	5/10/20 MHz Channel Width
	PSK, QPSK, 16-QAM, 64-QAM

EDS8012 / EDS8022

802.11b: 1, 2, 5.5, 11 802.11g: 6, 9, 12, 18, 36, 48, 54

802.11n: 6.5~300 (MCS0 to MCS15)

Technical Specifications Long-Range Wireless Outdoor Access Point/Client Bridge continued

Supported Data Rates (Mbps) continued

EDS8015 / EDS8025

802.11a: 6, 9, 12, 18, 36, 48, 54

802.11n: 6.5~300 (MCS0 to MCS15)

Power

Power Source (PoE Injector):

- 24V/.6A Proprietary Compliant Source
- Active Ethernet (Power over Ethernet, PoE)

Power Consumption

EDS8012 / EDS8022 7.2 W

EDS8015 / EDS8025 7 W

Management

Auto Channel Selection

- Settings varies by Regulatory Domains

SSIDs

BSSID Supports Four (4) SSIDs

VLAN Tagging

Independent VLAN settings can be enabled/disabled

Any packet that enters the device without a VLAN tag will have a VLAN tag inserted via a PVID (Ethernet Port VID)

VLAN Pass-through over WDS Bridge

SNMP & MIB

v1/v2c/v3 Support

MIB I/II and Private MIB

QoS

Compliant with IEEE 802.11e Standard

Save Configurations as Default

Saves the customized configuration as the default value for different customer demands

Client Traffic Status

Reports various information in a timely manner as required by the administrator

Control Features

RADIUS Accounting

Helps operators to offload 3G to Wi-Fi seamlessly

CLI Comments Support

Settings vary by Regulatory Domains

Distance Control (Ack Timeout)

Multicast Supported

Wi-Fi Scheduler

Sets the Schedule for rebooting the device

Security

WEP Encryption: 64/128/152 bit

WPA/WPA2 Enterprise (WPA-EAP using AES)

Hide SSID in Beacons

MAC Address Filtering (up to 50 addresses)

802.1x Authenticator

Security continued

Wireless STA (Client) Connection List

Reports various information in a timely manner as required by the administrator

Environmental & Physical

Operating Temperature: -4 °F to 140 °F (-20 °C to 60 °C)

Storage: -22 °F to 176 °F (-30 °C to 80 °C)

Humidity (non-condensing)

Operating: 90% or less

Storage: 90% or less

Waterproof

IP55-Rated Enclosure

Certifications

FCC, CE

Dimensions & Weights

AP/Client Bridge Device

Weight: 1.03 lbs. (0.47kg)

Depth: 7.4" (190mm) Height: 1.5" (38mm)

Technical Specifications 1-MP and 2-MP Day/Night Bullet IP Surveillance Camera

Camera

Image Sensor

EDS8012 / EDS8015

1/4" 1-Megapixel Progressive Scan CMOS Image Sensor

EDS8022 / EDS8025

1/2.7" 2-Megapixel Progressive Scan CMOS Image Sensor

Lens

Fixed Board Lens

EDS8012 / EDS8015 Fixed-Focus, 4 mm @ F1.5

EDS8022 / EDS8025 Fixed-Focus, 2.8 mm @ F1.8

F.O.V.

EDS8012 / EDS8015 62° (diagonal)

EDS8022 / EDS8025 120° (diagonal)

Day/Night

Removable Mechanical IR-Cut Filter

Minimum Illumination

EDS8012 / EDS8015

Color (IR-Off): 0.5 lux @ F1.5

B/W (IR-On): 0 lux @ F1.5

EDS8022 / EDS8025

Color (IR-Off): 0.1 lux @ F1.8

B/W (IR-On): 0 lux @ F1.8

IR Illuminator

EDS8012 / EDS8015

12 pcs IR Illuminator LEDs, effective up to 32-ft./10m $\,$

EDS8022 / EDS8025

12 pcs IR Illuminator LEDs, effective up to 82-ft./25m

Shutter Time

EDS8012 / EDS8015

1/7.5 sec. to 1/24,000 sec.

EDS8022 / EDS8025

1/2.5 sec. to 1/10,000 sec.

Physical Interface (All-in-One Cable)

1 x Cable Management Bracket

1 x All-in-One Cable

1 x RJ45 10/100 Base-T (802.3af PoE)

1 x Reset Button

1 x Alarm-In/Out

1 x DC Jack (12V/1A)

Technical Specifications 1-MP and 2-MP Day/Night Bullet IP Surveillance Camera continued

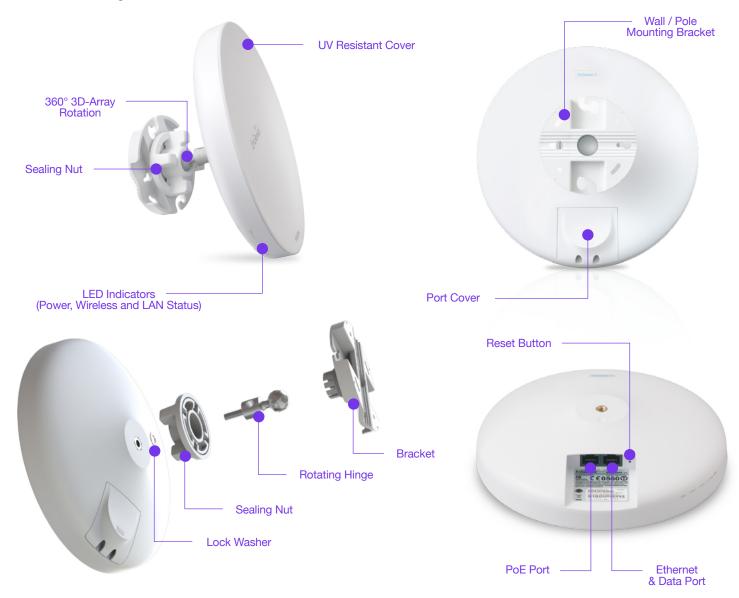
Power Input	Alarm & Event/Recording	Dimensions & Weights
Power Input: 12V/1AV, PoE 48V	Event Trigger	IP Camera Device with Bracket
	Motion/Alarm-In Detection	Weight: .69 lbs. (312 g)
Video	Event Notification	Length: 8.2" (208mm)
Compression	Email/Push Notifications	Width: 2.5" (63mm)
H.264/MPEG4/MJPEG	Event Actions	Height: 2.9" (73mm)
Stream	File Upload to NFS/SAMBA/FTP/SMT, EnGenius Cloud &	
2x Video Streams	Play Audio	EDS8012/EDS8015 Wireless IP Surveillance System
Frame Rates	Video Playback (PC/iPhone®/Android™)	Packaging
EDS8012 / EDS8015 Up to 30 fps at 1280 x 720	EnGenius Simple Smart Recording (Only for EnGenius	Weight: 4.14 lbs. (1.88kg)
EDS8022 / EDS8025 Up to 30 fps at 1920 x 1080	Cloud Series Routers/Gateways)	Width: 9.8" (249mm)
Image Settings	Video Buffer	Length: 14" (363mm)
Adjustable Image Size, Quality & Bit Rate	5-seconds pre-alarm/post-alarm	Height: 6.1" (155mm)
Configurable Brightness, Sharpness, Contrast, Saturation,	Schedule Recording	
Exposure	Mobile Apps Supported	Package Contents:
AGC/AWB/AES	iPhone/iPad/Android devices	• 1-MP or 2-MP Bullet IP Camera
Flip & Mirror		• 12V/1A Power Adapter
Time Stamp & Text Caption Overlay	Video Management Software	Mounting Kit
Manual/Auto Day & Night Mode	Viewing System Requirements	RJ-45 Ethernet Cable
WDR (Wide Dynamic Range) Technology	Operating System	Outdoor AP/Bridge
	Microsoft Windows XP/2000/2003/Vista/2007/2008	• PoE Injector (EPE-1212) with Power Adapter (24V/.6A)
Networking	Web Browsers	Pole/Wall Mounting Kit
Network	IE, Safari, Chrome, Firefox, Opera	Mounting Screw Set
10/100 Mbps Ethernet, RJ-45	View Clients	Quick Installation Guide
Power-over-Ethernet (PoE 802.3af class 2)	Live viewing for up to 5 Clients	
EnGenius DDNS		Certifications
Auto NAT Pass Through/UPnP Traversal	Environmental & Physical	FCC, CE
	Temperature Range	
Protocol	Operating: -4° F to 122° F (-20°C to 50° C)	Warranty
IPv4, TCP, UDP, DHCP, NTP, DNS, DDNS, SMTP, FTP, HTTP, UPnP, NFS/Samba client, QoS/DSCP, RTP, RTSP, 3GPP, PPPoE	Storage: -40° F to 140° F (-40° to 60° C)	1 Year
ONVIF Compatible (Profile S)	Humidity (non-condensing)	
	Operating: 80% or less	
Security		
Admin/User account level	Waterproof	
	1044.0 . 15 1	

IP66-Rated Enclosure

Compatible Products

Products	Product Description
Fiducts	Flouder Description
EnStation2	Long-Range Wireless 2.4 GHz Outdoor AP/Bridge
EnStation5	Long-Range Wireless 5 GHz Outdoor AP/Bridge
EDS5110	1-MP Day/Night Bullet IP Surveillance Camera
EDS5250	2-MP Day/Night Bullet IP Surveillance Camera

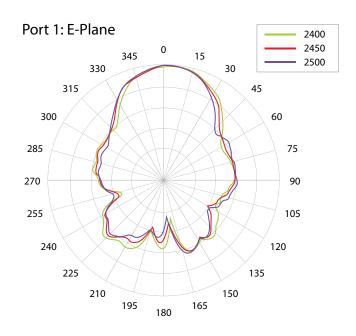
Outdoor AP/Bridge

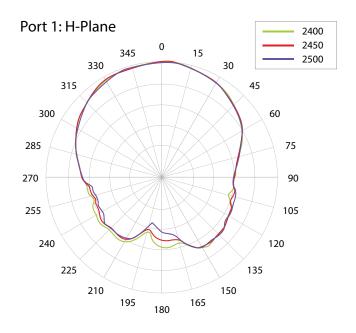


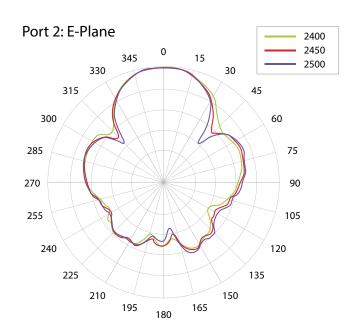
IP Camera

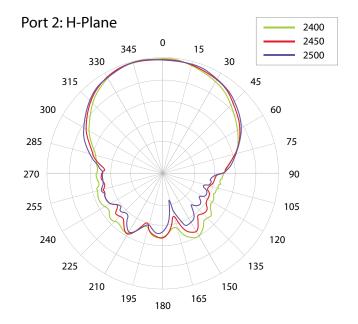


EDS8012 / EDS8022 Antenna Radiation Patterns

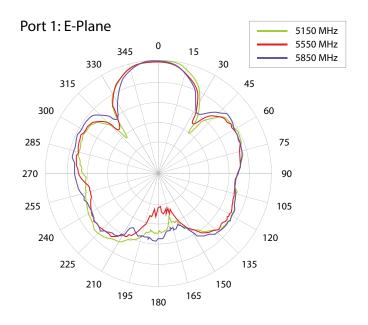


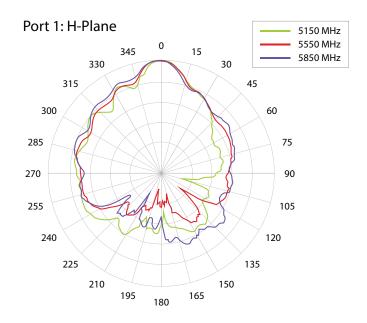


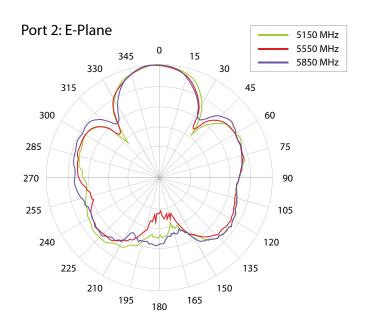


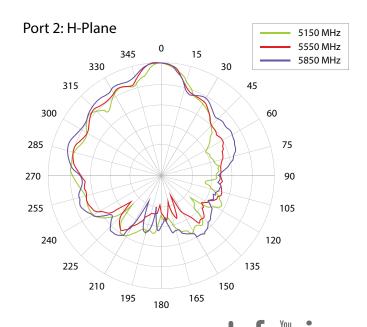


EDS8015 / EDS8025 Antenna Radiation Patterns









EnGenius Technologies | 1580 Scenic Ave. Costa Mesa, CA 92626 Email: partners@engeniustech.com | Phone: 888 - 735 - 7888 | Website: engeniustech.com

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