

# EG8141A5 Datasheet 01 (R019C20)

Huawei EG8141A5, an intelligent routing-type ONT

## Overview

The Huawei EG8141A5 is a routing-type ONT in the Huawei all-optical access solution. It uses the GPON technology to implement ultra-broadband access for users.

The high forwarding performance ensures the user experience of voice, data and HD video services, and provides customers with an ideal all-optical access solution and future-oriented service support capability.

- Smart service
- Smart interconnection
- Smart O&M



## Device Parameters

<b>Dimensions (H x W x D) (without external antenna and pads)</b>	32 mm x 145 mm x 97 mm	<b>Static power consumption</b>	4 W
<b>Weight</b>	About 180 g	<b>Maximum power consumption</b>	11 W
<b>Operating temperature</b>	0°C to 40°C	<b>NNI</b>	GPON
<b>Operating humidity</b>	5% RH to 95% RH (non- condensing)	<b>UNI</b>	1GE + 3FE + 1POTS + 2.4G Wi-Fi
<b>Power adapter input</b>	100–240 V AC, 50/60 Hz	<b>Optical Connector</b>	SC/APC
<b>System power supply</b>	11–14 V DC, 1 A	<b>Indicators</b>	Power/PON/LOS/LAN/TEL/ WLAN/WPS

## Interface Parameters

<b>GPON port</b>	<b>Ethernet port</b>
<ul style="list-style-type: none"> <li>• Class B+</li> <li>• Receiver sensitivity: -27 dBm</li> <li>• Overload optical power: -8 dBm</li> <li>• Wavelengths: US 1310 nm, DS 1490 nm</li> <li>• Wavelength blocking filter (WBF) of G.984.5</li> <li>• Flexible mapping between GEM Port and TCONT</li> <li>• GPON: consistent with the SN or password authentication defined in G.984.3</li> <li>• Bi-directional FEC</li> <li>• SR-DBA and NSR-DBA</li> </ul>	<ul style="list-style-type: none"> <li>• Ethernet port-based VLAN tags and tag removal</li> <li>• 1:1 VLAN, N:1 VLAN, or VLAN transparent transmission</li> <li>• QinQ VLAN</li> <li>• Limit on the number of learned MAC addresses</li> <li>• MAC address learning</li> <li>• GE: Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s</li> <li>• FE: Auto-adaptive 10 Mbit/s or 100 Mbit/s</li> </ul>
<b>WLAN</b>	<b>POTS port</b>
<ul style="list-style-type: none"> <li>• IEEE 802.11 b/g/n</li> <li>• 2 x 2 MIMO</li> <li>• Antenna gain: 5 dBi</li> <li>• WMM</li> <li>• Multiple SSIDs</li> <li>• WPS</li> <li>• Air interface rate: 300 Mbps</li> </ul>	<ul style="list-style-type: none"> <li>• Maximum REN: 4</li> <li>• G.711A/μ, G.729a/b and G.722 encoding/decoding</li> <li>• T.30/T.38/G.711 fax mode</li> <li>• DTMF</li> <li>• Emergency calls (with the SIP protocol)</li> </ul>

## Product Function


<b>Layer 3 features</b>	<b>Smart O&amp;M</b>	<b>Smart interconnection</b>	<b>QoS</b>
<ul style="list-style-type: none"> <li>• PPPoE/Static IP/DHCP</li> <li>• NAT/NAPT</li> </ul>	<ul style="list-style-type: none"> <li>• IPTV video quality diagnosis</li> <li>• Rogue ONT detection</li> </ul>	<ul style="list-style-type: none"> <li>• Smart Wi-Fi coverage</li> <li>• SIP/H.248 auto-negotiation</li> </ul>	<ul style="list-style-type: none"> <li>• Ethernet port rate limitation</li> <li>• 802.1p priority</li> </ul>

<ul style="list-style-type: none"> <li>• Port forwarding</li> <li>• ALG, UPnP</li> <li>• DDNS/DNS server/DNS client</li> <li>• IPv6/IPv4 dual stack, and DS-Lite</li> <li>• Static/Default routes</li> <li>• Multiple services on one WAN port</li> </ul>	<p>and isolation from the OLT</p> <ul style="list-style-type: none"> <li>• Call emulation, and circuit test and loop-line test</li> <li>• PPPoE/DHCP simulation testing</li> <li>• WLAN emulation</li> </ul>	<ul style="list-style-type: none"> <li>• Any port any service</li> <li>• Parental control</li> <li>• L2/L3(IPv4) forwarding: 1G uplink, 1.3G downlink</li> </ul>	<ul style="list-style-type: none"> <li>• SP/WRR/SP+WRR</li> <li>• Broadcast packet rate limitation</li> </ul>
			<p><b>Common O&amp;M</b></p> <ul style="list-style-type: none"> <li>• OMCI/Web UI/TR069</li> <li>• Variable-length OMCI messages</li> <li>• Dual-system software backup and rollback</li> </ul>
<b>Smart service</b>	<b>Security</b>	<b>Multicast</b>	<b>Power saving</b>
<ul style="list-style-type: none"> <li>• Smart Wi-Fi sharing: Portal/802.1x authentication, SoftGRE-based sharing</li> <li>• Scheduled Wi-Fi shutdown</li> </ul>	<ul style="list-style-type: none"> <li>• SPI firewall</li> <li>• Filtering based on MAC/IP/URL addresses</li> </ul>	<ul style="list-style-type: none"> <li>• IGMP v2/v3 proxy/snooping</li> <li>• MLD v1/v2 snooping</li> </ul>	<ul style="list-style-type: none"> <li>• Indicator power saving</li> </ul>

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