



# G.L.E.N.<sup>®</sup>

Gigabit LAN Extension Node

G.L.E.N.<sup>®</sup> - Robust Ethernet switch acting as a backbone connectivity for Smart City Projects, Smart Industry Projects and much more. Existing data networks can be easily expanded with IoT applications.

Supported by the Cisco ESS3300 switch, G.L.E.N.<sup>®</sup> is a safe and compact solution for harsh environmental conditions in public, industrial and KRITIS environments.



**G.L.E.N.®**

Feature	Value / Detail
<b>Security</b>	<ul style="list-style-type: none"> <li>Enterprise-Level Cisco IOS-XE switching security</li> <li>2-level Intrusion Detection</li> </ul>
<b>Software Functions</b>	<p><b>Network Essential License (Layer 2):</b></p> <ul style="list-style-type: none"> <li>IEEE 802.1, 802.3 standard, NTP, UDLD, CDP, LLDP, unicast MAC filter, VTPv2, VTPv3, EtherChannel, voice VLAN, PVST+, MSTP, and RSTP</li> <li>Multicast: IGMPv1, v2, v3 snooping, IGMP filtering, IGMP querier</li> <li>Management: Web UI, MIB, SmartPort, SNMP, syslog, DHCP server, SPAN session, Full Flexible Netflow, NETCONF, RESTCONF</li> <li>Security: Port security, 802.1x, DHCP snooping, dynamic ARP inspection, IP source guard, guest VLAN, MAC authentication bypass, 802.1x multidomain authentication, storm control - unicast, multicast, broadcast, SCP, SSH, SNMPv3, TACACS+, RADIUS server/client, MAC address notification, BPDU guard, Central Web guard Authentication, ARP Snooping</li> <li>Quality of Service: Ingress policing, rate limit, egress queuing/shaping, autoQoS</li> <li>Layer 2 IPv6: IPv6 host support, HTTP over IPv6, SNMP over IPv6</li> <li>Redundancy Protocols: REP</li> </ul> <p><b>Network Advantage License (Layer 3):</b></p> <ul style="list-style-type: none"> <li>IP routing: OSPF (V2 and V3), RIP (V1 and V2), ISIS (for IPv4 and IPv6), EIGRP (for IPv4 and IPv6), PBR (Policy Based Routing)</li> <li>Virtualization: VRF-lite</li> <li>Security: MACsec-256</li> <li>Multicast: PIM sparse mode (PIM-SM), PIM dense mode (PIM-DM) and PIM Sparse dense mode</li> <li>High Availability: Bidirectional Forwarding Detection (BFD) echo mode, HSRP (IPv4 and IPv6), VRRP (IPv4 and IPv6)</li> </ul>
<b>Uplink Interfaces</b>	<ul style="list-style-type: none"> <li>2x 1/10Gbit, Customer specific configurable</li> <li>SFP+</li> <li>Externally accessible</li> <li>M32x1 Industry standard for easy field assembly; further options in preparation</li> </ul>
<b>Downlink Interfaces</b>	<ul style="list-style-type: none"> <li>4x 10/100/1000Base-T</li> <li>PoE 802.3at on all four ports</li> <li>M12-X-coded; screw connection</li> </ul>
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>220-240VAC / 50-60Hz high efficiency power supply for low heat waste (up to 95% efficiency); Inrush-Current free topologie</li> <li>NEUTRIK powerCON® TRUE1 TOP connection system for easy field assembly</li> <li>Power consumption 165W max.</li> </ul>
<b>Certifications/ Approvals</b>	<p>CE</p> <ul style="list-style-type: none"> <li>Emission according to EN 55032:2015 Class B</li> <li>Immunity according to EN 61000-6-2:2019 (EN 61000-4-2/-3/-4/-5/-6/-8/-11)</li> <li>Safety according to EN 62368-1:2014 + AC:2015</li> </ul> <p>Environmental</p> <ul style="list-style-type: none"> <li>TR 2130 Issue E, August 2014 (DIN EN 60068-2-27/-64)</li> </ul>
<b>Environmental conditions</b>	<ul style="list-style-type: none"> <li>Operating temperature -30°C up to +60°C environment; natural convection(DIN EN 60068-2-14:2021-04)</li> <li>Humidity 93%@40°C; non condensing (DIN EN 60068-2-78:2014-02)</li> <li>Degree of protection IP66 (DIN EN 60529:2014-09)</li> </ul>
<b>Dimensions</b>	240 mm x 111 mm x 74 mm <sup>1)</sup>
<b>Mounting</b>	<ul style="list-style-type: none"> <li>Housing-integrated Nut6</li> <li>DIN rail mounting via adapter for hanging</li> <li>custom solution on request</li> </ul>
<b>Weight</b>	max. 2,3 kg <sup>1)</sup>

1) without brackets and external connectors

Naming	PN
G.L.E.N.®	100XXX.XX

