The Genesys WiFi Module provides a powerhouse of wireless connectivity to any existing Genesys Modular Stack solution. With it comes an IEEE 802.11b/g/n transceiver in addition to a full package of RFC-compliant network, transport and application layer protocols implemented in firmware. Any Genesys Modular Stack solution fitted with the WiFi module acquires fast, robust and easily integrated wireless connectivity.

**A FULL SPECTRUM OF PROTOCOLS**

The WiFi Module can support up to 10 simultaneous TCP/UDP sockets in addition to two listening sockets. It is also able to act as client/server for a number of standard networking protocols, host its own webpage and send and receive emails, among many other features.

**IRON-CLAD SECURITY**

The WiFi module implements a number of encryption standards and hashing functions which gives any application the tools for industry-standard security in wired or wireless communication. The module can implement a micro access point, WiFi client or ad-hoc WiFi network in order to establish communications with a surrounding WiFi network or provide its own WiFi network.

### CHARACTERISTICS OVERVIEW

<table>
<thead>
<tr>
<th>WiFi</th>
<th>IEEE 802.11bgn compliant transceiver</th>
<th>Maximum data rate: up to 54Mbit/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>38m(bg), 70m(n) indoor, 140m outdoor</td>
<td>Micro access point, client or ad-hoc modes</td>
</tr>
<tr>
<td>Dimensions</td>
<td>54mm x 28mm</td>
<td></td>
</tr>
<tr>
<td>Connectivity</td>
<td>Capability to bridge WiFi to 10/100 Ethernet</td>
<td></td>
</tr>
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</table>

Genesys Modular Stack allows for easy interconnection of expansion modules. Genesys Modular Stack compliant modules feature a characteristic pair of board-to-board feedthrough connectors ensuring that they are infinitely stackable with each module adding new functionality. The Keyfob Base Board is fully compatible with Genesys Modular Stack.
CHARACTERISTICS

WiFi SPECIFICATIONS
- IEEE 802.11bgn compliant transceiver
- Maximum data rate: up to 54Mbit/s
- Range: 38m(bg), 70m(n) indoor, 140/250m outdoor.
- Capability to bridge WiFi to 10/100 Ethernet (PHY-PHY or MAC-MAC)
- Micro access point, WiFi client or ad-hoc WiFi modes of operation

PROTOCOL STACK SPECIFICATIONS
- Clients: ARP, ICMP, IP, UDP, TCP, DHCP, DNS, NTP, SMTP, POP3, MIME, HTTP, FTP and TELNET
- Servers: HTTP, DHCP
- Comprehensive security suite: SSL3/TLS1, HTTPS, FTPS, RSA, AES-128/256, 3DES, RC-4, SHA-1, MD-5, WEP, WPA and WPA2 with hardware acceleration for AES, 3DES and SHA.

USB
- USB micro A/B Device Port

MEMORY
- 2kb Serial EEPROM with Factory-Programmed EUI-48™ Address and Embedded Unique 128-bit Serial Number

PHYSICAL
- Dimensions: 73mm x 34mm

ENVIRONMENTAL
- Temperature (operating): -15°C to +55°C
- Temperature (survival): -55°C to +85°C
- Humidity (operating): 95% RH at 50°C

POWER
- Genesys Modular Stack 3V3 Power Load:
  - <20μA (Static)
  - 300mA (Dynamic)

MOUNTING DIMENSION DRAWING