

StarGazer Platform

Product Overview

The StarGazer platform provides competitively priced LAN to WWAN 4G routing in a single basic unit certified on the TMobile cellular network. The direct system connection eliminates security issues associated with access through customer networks, and makes installation safe and secure.

StarGazer provides direct internet connection to the GCS Automation System through an ethernet interface directly with the NPM-1 graphical interface module.

StarGazer uniquely resolves common problems associated with wireless M2M connectivity. Built in software and hardware watchdogs continuously monitor each component of the product and in the event an issue is detected, takes steps to re-establish connectivity. All software and configuration images are protected with digital signatures and have dual rollback images that allow the modem to revert to previous working settings if an issue is detected.

The GCS building automation system is maintained and monitored through standard browser connections, providing total interrogation, programming and report generation.



Features

- Connection with NPM-1 graphical interface module through ethernet connection.
- Safe, secure access and system integrity.
- No connection or interaction with customer network or IT departments..
- May be used on any automation system or equipment.

Specifications

Interfaces

Modem:	Embedded 160M modem with 2 x SMA cellular antenna connectors Optional dual modem (required the COR Extendability Dock) with Modular MC400 Modem
Ethernet:	1 x GbE (LAN/WAN switchable) 1 x FE (LAN/WAN switchable)
Wi-Fi:	Single radio, single band (2.4GHz) 2x2 MIMO 802.11b/g/n Wi-Fi4 300 Mbps (2.4GHz) Two (2) Wi-Fi SSID's WPA/WPA2/SPA3 Personal, SPA2/WPA3 Enterprise, Open Wi-Fi Alliance Certified
Expansions:	1 x USB 2.0 Type A (output: 5V, 500mA, 2.5W) 1 x Extensibility Port Extensibility Dock 9-Wire Power and GPIO Cable Serial Port Adapter
GNSS/GPS:	1 x SMA GNSS antenna connector

Environmental

Temperature:	Operating:	-20°C to 60°C (-4°F to 140°F)
	Storage:	-20°C to 70°C (-4°F to 158°F)
Humidity:	Operating:	5% to 95%, non-condensing
	Storage:	5% to 95%, non-condensing

Power

Required:	One of the following:	9-33 VDC steady state input External DC power supply, 100-240 VAC input, 12VDC 3A output (included)
	Features:	Reverse polarity and transient voltage protection (ISO 7637-2) Ignition sensing (automatic ON and time-delay OFF)
Consumption:	Idle:	4 W
	W-Fi TX/RX:	9 W
	LTE TX/RX:	6.25 W

Physical

Size:	118 x 113.5 x 29.3 mm (4.6 x 4.5 x 1.2 in)
Weight:	400 g (14 oz)

Certifications

Safety:	UL/cUL CB Scheme, EN 60950-1, EN 62368-1, MIL-STD 810G, SAI J1455
Materials:	WEEE, RoHS, REACH, California Prop 65

Reliability

Calculated MTBF:	892,499 hours (Telcordia SR332 at 25°F)
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Wi-Fi Power

FCC:	2.4 GHz band: 15.44 dBm Conducted
Canada:	2.4 GHz band: 20 dBm EIRP
Rest of World:	2.4 GHz band: 15.44 dBm Conducted
	2.4 GHz band: 20 dBm EIRP

Performance

Stateful Firewall Throughput:	75 Mbps
IPSec VPN Throughput:	10 Mbps
Concurrent VPN Tunnels:	5
Concurrent Sessions (TPC):	16,000
Typical Client Count:	5