# **SENSONODE GOLD GATEWAY**

(SN-G4-x-Cx)

Parker's Voice of the Machine ™ IoT platform has become even stronger in the industrial environment with the introduction of the fourth generation SensoNODE ™ Gold gateway.

#### **SOFTWARE**

Upon commercial release, the kernel utilized is Linux Yocto™ (5.15.124 Yocto Standard). The operating system deployed on every SensoNODE Gold gateway is Parker's Voice of the Machine Edge.



The sub gigahertz radio uses 63 channels located in the 902-927 MHz band. The first of the 63 channels is located at 902.4 MHz. The channels are spaced at 400 KHz within this range. The sensor to gateway frequency range utilized in the North American market is 908-916 MHz. Other geographic markets use different bands and channel lists. The wireless transmissions operate using a frequency hopping mode. Due to frequency hopping and low data transmission rates, the actual channel utilization is very low. The sub gigahertz radio transmits with a power level of 14 dBm. The modulation is 2-GFSK, 200 KHz channels.

### **GATEWAY TO CLOUD**

The modem utilized in the gateway is a Telit MV31-W. The modem operates using the LTE-M (Primary) low-power wide-area cellular network. The 700 MHz frequency is used in conjunction with bands 2, 4, 5, 17. The gateway is also equipped with Ethernet capability. It contains three Intel® GbE: 2x i210; iAMT supported. It also contains a Wi-Fi 6E module with two antennas.



#### **GATEWAY INTERFERENCE**

The system has been subjected to 3rd party spectrum analysis to determine wireless interference with Land Mobile Radios (LMR) within industrial environments. It was determined that no meaningful effect on LMR traffic existed. Given the system operates in frequency hopping mode and due to frequency hopping and low data transmission rates, the actual channel utilization is very low.

#### REQUIRED ACCESSORIES

To enable communication between the SensoNODE Gold gateway and SensoNODE Gold sensors, the SensoNODE Gold Wireless Receiver (SN-WR4-x) must be purchased separately.

Parker Hannifin Corporation Quick Coupling Division 8145 Lewis Road Minneapolis, MN 55427

phone 763 544 7781 fax 763 544 3418 QCD.Support@support.parker.com

Parker.com/QCD

© 2024 Parker Hannifin Corporation

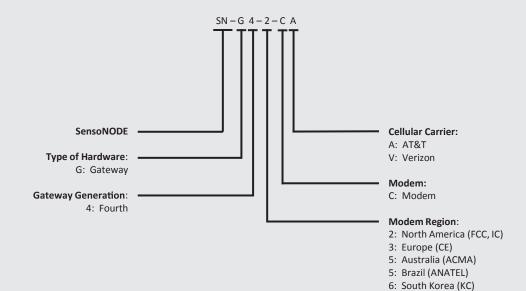


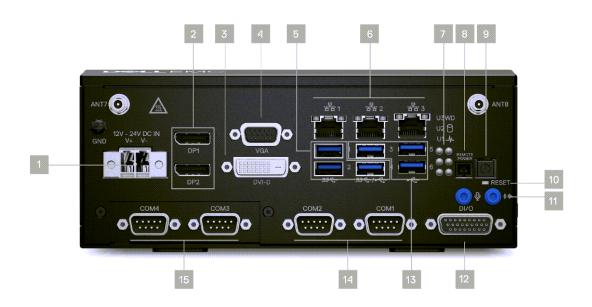
Feature	SN-G4-x-Cx	
General		
Kernel	Linux Yocto	
Processor	Intel® Core™ i5-9500	
TDP	35 W	
Number of Cores	6	
Base Frequency	2.2 GHz	
Maximum Turbo Frequency	3.6 GHz	
PCH	C246	
Memory	2x DDR4 SO-DIMMs, 16GB	
IO Interfaces		
Display	2x DP++, DVI-D, VGA	
Ethernet	3x Intel® GbE: 2x i210; iAMT supported	
Wi-Fi	Wi-Fi 6e (2.4 2.495 GHz; 5.17- 5.835 GHz; 5.925-7.125 GHz)	
Bluetooth	BLE 5.3 (2.4 GHz)	
Serial Ports	COM1/2: RS-232/422/485; COM3/4: RS-232	
Digital I/O	8-Ch DI / 8-Ch DO	
USB	3x USB 2.0; 2x USB 3.1 G2; 1x USB 3.1 G1	
Audio	Line out; Mic in	
Mini PCle	USB 2.0+Pcle	
M.2	1x socket 2, key B+M or B 1x 2280 / 3042 (USB 3.1 + SATA 6 Gb/s + 2x PCle)	
USIM	2x nanoSIM slot	
Security		
TPM	TPM2.0	
Storage		
Disk	256GB Internal 2.5" SATA, 1x slot	
Technology	Power Loss Protection	

Feature	SN-G4-x-Cx	
Physical		
Cooling	Fanless	
Dimensions	3.39" (H) x 8.27" (W) x 9.45" (D)	
Weight	Net: 10.36 lbs ; Gross: 11.68 lbs	
Mounting	Desktop; wall mount	
Power Supply		
DC Input	12-24V (±10% tolerance)	
AC Input	Optional: 180W; 60W (PoE); AC-DC adapter	
Environmental		
Operating Temperature	32°F to 140°F (with 2.0 ft/s airflow)  Derate Max Temp 1.8°F / 1,000 ft  above sea level	
Storage Temperature	-40°F to 185°F (excluding storage devices)	
Altitude	Sea level to 3 miles	
Humidity	95% at 104°F	
Vibration	MIL-STD-810G METHOD 514.6 category 4	
Shock	IEC-60068-2-27, half sine pulse 20G, MIL-STD-810G METHOD 516.6; sawtooth pulse	
IP Rating	IP30	
EMC	FCC, CE, ICES	
Safety	IEC, EN, UL, CSA 63268-1	
Regions		
United States, Canada, Mexico	2 (915 MHz)	
European Union	3 (868 MHz)	
Japan	4 (926 MHz)	
Australia / New Zealand / Brazil / Chile	5 (922 MHz)	
South Korea	6 (922 MHz)	
Cellular		
AT&T	CA (all certifications completed)	
Verizon	CV (all certifications completed)	
Custom	Customer provided SIM and APN	
SIM	Nano SIM (12.3mm x 8.8mm; 4FF)	
Modem	Telit MV31-W	



# The Part Number





- 1. DC Power Input
- 2. Display Port x 2
- 3. DVI-D
- 4. VGA
- 5. USB 3.1 Type-A x 3
- 6. Gigabit Ethernet x 3
- 7. LED Indicators

- 8. Extend Power
- 9. Power Button
- 10. Reset Button
- 11. Audio (Mic, Speaker) x 2
- 12. Digital Input / Output
- 13. USB 2.0 Type-A x 3
- 14. COM Port (232 / 485) x 2
- 15. FM Input / Output x2





# **Dimensions**

Depth: 9.45 inches 240 millimeters
 Width: 8.27 inches 211 millimeters
 Depth: 3.39 inches 86 millimeters

# Weight

10.36 pounds 4.70 kilograms

# Wall Mounted

