



# NW-4G LTE Modem

**Rise above the 2G/3G sunset by replacing your Motorola G24 modem without losing your legacy system.**

Between 2020 and 2025 most carriers will no longer support 2G and 3G connectivity, requiring companies to invest in system upgrades. NeuronicWorks Inc. has created the NW 4G LTE Modem Board to perfectly match your current INIT (Innovations in Transportation Inc.) system and preserve your legacy system.

## OUR PRODUCT

NW-4G LTE is a cellular communication modem specifically designed for the public transit industry to replace the Motorola G-series GSM modem. The board mechanically and electrically fits INIT solutions for buses and bus station signs.

## BENEFITS

Adopting the NW-4G LTE modem helps you:

- Preserve your existing legacy system and extend its life.
- Save costs associated with acquiring, testing and integrating a new system.
- Maintain your systems and only update the cellular connectivity.

## OUR SERVICE

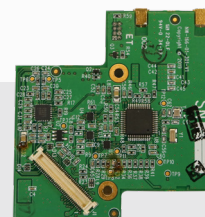
Our services include:

- Further customization if needed
- System integration
- Firmware updates

### NW-4G LTE MODEM



Board Footprint



### LEGACY INIT PCB



with Motorola G24



with NW-4G LTE modem

**Stay ahead of the 2G and 3G network sunset. Contact us today!**

**Titu Botos, CEO**

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## TECHNICAL SPECIFICATIONS

# NW-4G LTE Modem

Product No.: NW-166-01

<b>Cellular communication</b>	4G LTE CAT4, fallback to 3G UMTS/DC-HSPA+ and 2G GSM/(E)GPRS
<b>4G LTE operating bands</b>	2, 4, 5, 7, 17 (N. America) BW 1.4 - 20 MHz, MIMO 2x2, Rx diversity
<b>3G UMTS/DC-HSPA+ bands (in MHz)</b>	850/900/1700/1900/2100
<b>2G GSM bands (in MHz)</b>	850/900/1800/1900, 42 Mbit/s downlink, 5.76 Mbit/s uplink
<b>Certifications and approvals</b>	PTCRB, GCF, FCC, ISED, RED, AT&T, Anatel, Rogers (Canada), Verizon, T-Mobile
<b>Cellular communication module</b>	U-Blox TOBY-L2
<b>UART serial port</b>	Configuration, control and data transfer by AT messages
<b>USB 2.0 port</b>	<ul style="list-style-type: none"> <li>Optional for AT messages</li> <li>Module firmware update</li> </ul>
<b>Commands</b>	Mirrors selected commands of Motorola G-series GSM modems
<b>SIM</b>	Capable of 1.8V and 3.3V signalling
<b>Interface connector</b>	Molex 53748-0708, same as in the original G24 modem
<b>RF Antenna ports</b>	Two MMCX to support LTE MIMO and LTE/UMTS antenna diversity
<b>Normal operating voltage range</b>	+3.4V to +4.35V
<b>Operating temperature range</b>	-20°C to +60°C
<b>Mechanical shock and vibrations</b>	<ul style="list-style-type: none"> <li>Per SAE/USCAR-2 Revision 6,</li> <li>Section 5.4.6 Per IEC 60068-2</li> </ul>
<b>MTBF</b>	938022 hrs at 40°C, per stress method of TELCORDIA SR-332- ISSUE 3
<b>Additional Requirements</b>	Second LTE antenna
	LTE SIM Card from the Network Carrier
	The 2G/3G APN on the CopilotPC changed to an APN on LTE network

## Contact us today!

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NW-4G LTE is a Canadian product made by NeuronicWorks Inc., engineering design company specialized in custom electronic solutions.

## NEURONICWORKS INC.

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Made in Canada

