

Amphenol LTW

# NMEA 2000

High Signal Reliability  
Standardized Network

**NEW**

- ✓ Unique **PUSH-PULL** interface
- ✓ Truly **Backward** compatible to all existing NMEA 2000 sockets



### Lite (Micro)

Push pull, Screw thread  
Metal, Plastic



### Heavy (Mini)

Screw thread  
Metal



### NMEA Starter Kit

Basic, Pro, Advance  
Metal, Plastic



### Blister Packing

Small, medium, large size  
Metal, Plastic



### Accessory

Adaptor, T-Cable... etc.  
Metal, Plastic



Unrivaled InterConnects for Harsh Environments

# About ALTW



## 3

**Production Sites**  
(Taiwan, China, Mexico)



## 30+

**Market Applications**



## 90,000+

**Products**

Since 1993, Amphenol LTW Technology “ALTW” lives and breathes to create, innovate, design and produce “***unrivaled interconnects for harsh environments***”. With over 300 worldwide patents, not only does ALTW offer the broadest and widest range of rugged interconnects in the industry but also customization with the mission of “Customer Satisfaction First”. Undoubtedly, ALTW is the leader in rugged interconnects, highly recognized for its uncompromising quality, short lead time, fast and tailored service and its very competitive pricing.

Regardless of the challenging environments that your products will be subject to; there is a very good chance that you will find what you are looking for with ALTW.

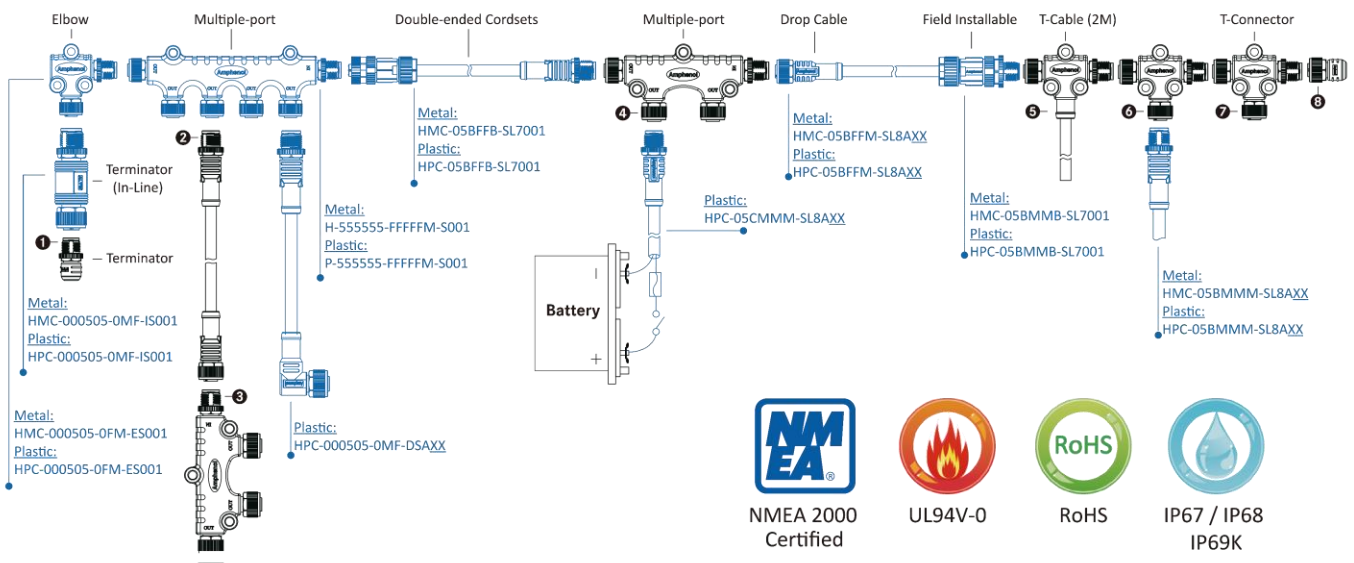
# NMEA 2000

Amphenol LTW NMEA 2000 Connector System is specifically designed to meet NMEA 2000 protocols and standards. The IP68-rated family of multi-port, standard and metric circular connectors, sensors and actuator cables, and elbow joints are ideal for connecting marine electronic equipment and display units within ships and boats. The NMEA 2000 line features high signal reliability, allowing multiple electronic devices to share data over one common channel. Starter kits are available for this Amphenol LTW connector system, offered in basic packages and professional packages, to help build NMEA 2000 networks with varying levels of complexity.

ALTW's NMEA 2000 network system can be applied in a wide range of applications, such as fish finder, GPS receivers, auto pilots, sonars and audio-systems. ALTW's NMEA 2000 solutions can enhance the performance of your marine electronic devices.



## ALTW's NMEA 2000 Network System



# PUSH PULL Connector



- ✓ Unique technology patent: **Spring Lock Designed.**
- ✓ 100% **truly backward compatible** to ALL female M12 \* 1.0 sockets made by different manufacturers.
- ✓ **Saves over 80%** installation time vs. standard M12 screw thread mating.
- ✓ **NMEA 2000 certificate:** 2025 Q2 ready



Quick Lock  
Solution



Up to IP69K



RoHS



UV Resistant



Thermoplastic  
UL Recognized

**EASY • FAST • SECURE • RELIABLE**

Amphenol LTW is excited to introduce the PUSH PULL version of the NMEA 2000 Connector. Thanks to a unique patent, this PUSH PULL NMEA 2000 connector is completely backward compatible with all female M12\*1.0 sockets. With its innovative design, users receive audible feedback as they connect it, speeding up deployment significantly. Unlike traditional screw couplings requiring multiple rotations to secure, this design requires just one push. This ensures protection against water and dust, making the NMEA 2000 PUSH PULL connectors an optimal solution for the marine market.

## PERFORMANCE SPECIFICATIONS

- One simple Push-to-Plug and Pull-to-Unplug
- Saving on-site installation time & costs
- Direct-connect with existing socket, no need to buy a mating pair from ALTW
- Durability: 500 cycles
- Salt spray: 48h
- Meets IP68 ingress protection
- Available in straight and right angle

**Get Sample Now**

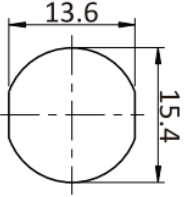
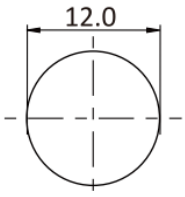
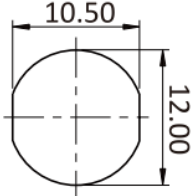
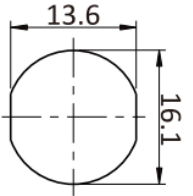
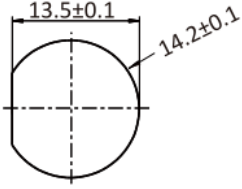
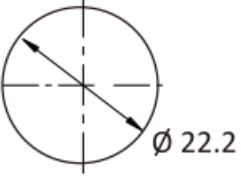


# Product Range Overview

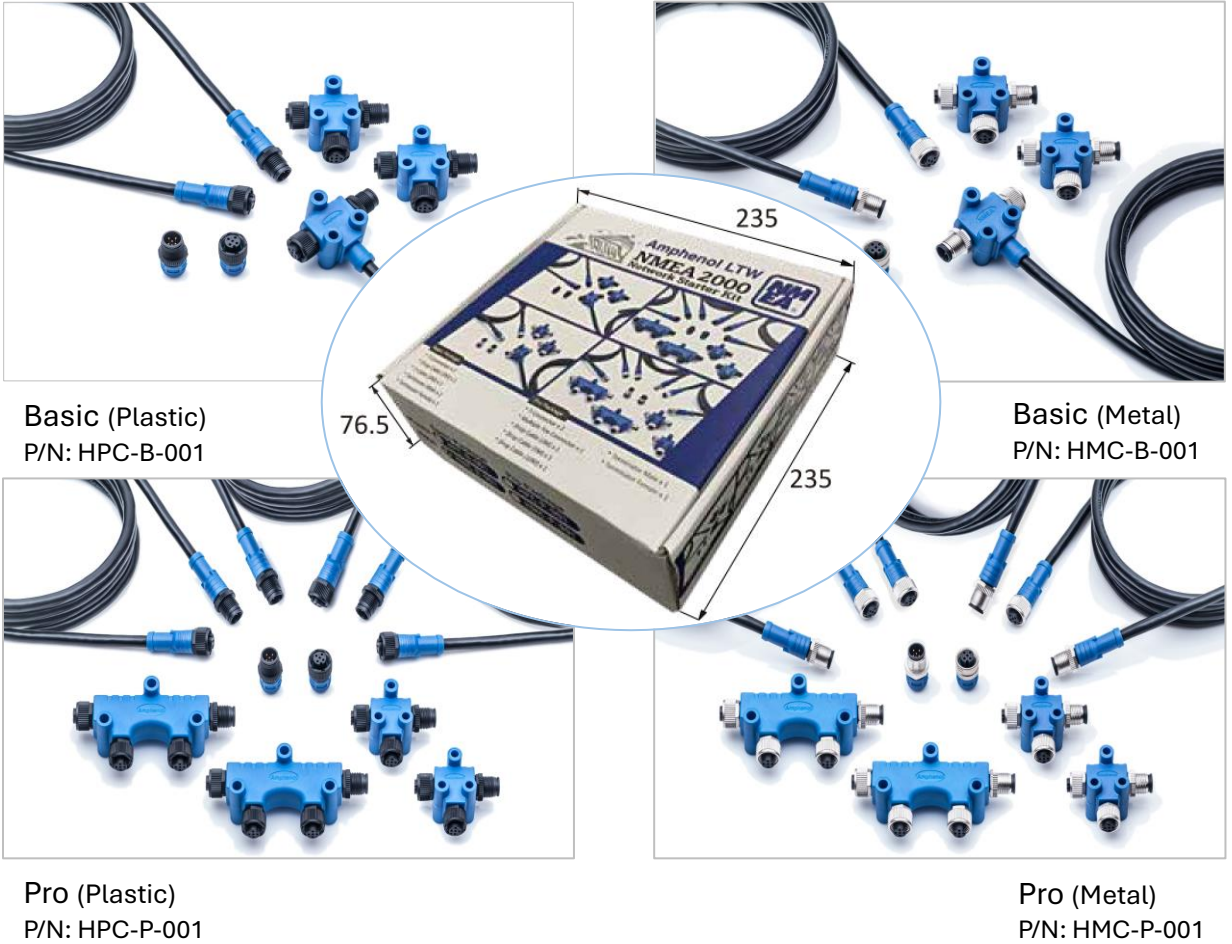
SUB SERIES	Lite (Micro)	Heavy (Mini)
Mating Style	Push Pull, Screw Thread	Screw Thread
Plastic Version	✓	-
Metal Version	✓	✓
No. of Contacts	5	4 ~ 5
Plating of Contacts	Gold Plating	Gold Plating
Operating Voltage (AC/DC)	60V	600V
Nominal Current	4A	8A
Operating Temperature	Receptacle: -40°C ~ 105°C Receptacle With Wire: -20°C ~ 85°C Overmolded With Cable: -20°C ~ 85°C Field Serviceable/Installable: -40°C ~ 105°C	
Fasten Style of Nut	Front	Front
Receptacle	✓	✓
Receptacle with Wire	✓	-
Field Serviceable/Installable	✓	✓
Overmolded with Cable	✓	✓
Accessories	✓	✓
Mating Cycles (Pin Contact)	Push Pull 500 Cycles Screw Thread 1,000 Cycles (IEC 100 Cycles)	1,000 Cycles (IEC 100 Cycles)
IP Rating	Receptacle, Receptacle With Wires: IP68 (Unmated, 1M / 24h) Field Serviceable/Installable: IP67 (Mated) Overmolded With Cable: IP68 (Mated, 1M / 24h)	
Salt Spray (Connector, Mated)	Metal: 48h (Mated) Plastic: 1,000h (Mated), 48h (Unmated)	
UV Resistant	✓	✓
Flammability Rating	UL94V-0	UL94HB
Vibration Resistant	Frequency Range 10 ~ 500Hz / Amplitude 0.35mm	
ROSH Compliant	✓	✓
REACH Compliant	✓	✓
Certificates	NMEA 2000 *Push Pull Version: In Progress	NMEA 2000
Applicable Wire Gauge	16AWG (1.50mm <sup>2</sup> )*1P + 20AWG (0.50mm <sup>2</sup> )*1P 18AWG (0.75mm <sup>2</sup> )*1P + 22AWG (0.34mm <sup>2</sup> )*1P 22AWG (0.34mm <sup>2</sup> )*1P + 24AWG (0.24mm <sup>2</sup> )*1P	15AWG (1.62mm <sup>2</sup> )*1P + 18AWG (0.75mm <sup>2</sup> )*1P 16AWG (1.50mm <sup>2</sup> )*1P + 18AWG (0.75mm <sup>2</sup> )*1P

# Panel Cut Out

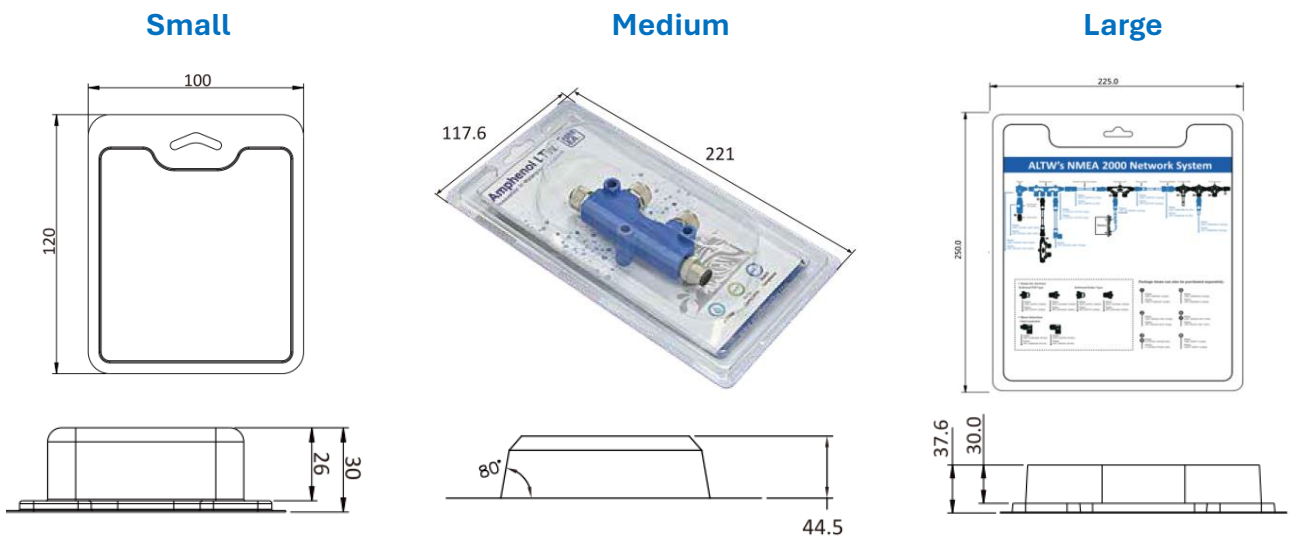
(unit: mm)

<b>Lite (Micro)</b>	<table border="1"> <tr><td>✓</td><td>Screw Threaded</td></tr> <tr><td>✓</td><td>Push Pull</td></tr> <tr><td>-</td><td>Push Lock</td></tr> </table>	✓	Screw Threaded	✓	Push Pull	-	Push Lock	Male / Female	Double-Ended
	✓	Screw Threaded							
	✓	Push Pull							
-	Push Lock								
<table border="1"> <tr><td>✓</td><td>Metal</td></tr> <tr><td>-</td><td>Plastic</td></tr> </table>	✓	Metal	-	Plastic					
✓	Metal								
-	Plastic								
<table border="1"> <tr><td>✓</td><td>Screw Threaded</td></tr> <tr><td>-</td><td>Push Pull</td></tr> <tr><td>-</td><td>Push Lock</td></tr> </table>	✓	Screw Threaded	-	Push Pull	-	Push Lock	Male	Female	
✓	Screw Threaded								
-	Push Pull								
-	Push Lock								
<table border="1"> <tr><td>-</td><td>Metal</td></tr> <tr><td>✓</td><td>Plastic</td></tr> </table>	-	Metal	✓	Plastic					
-	Metal								
✓	Plastic								
<table border="1"> <tr><td>-</td><td>Screw Threaded</td></tr> <tr><td>-</td><td>Push Pull</td></tr> <tr><td>✓</td><td>Push Lock</td></tr> </table>	-	Screw Threaded	-	Push Pull	✓	Push Lock	Circular Flange (D Cut) Male / Female		
-	Screw Threaded								
-	Push Pull								
✓	Push Lock								
<table border="1"> <tr><td>✓</td><td>Metal</td></tr> <tr><td>✓</td><td>Plastic</td></tr> </table>	✓	Metal	✓	Plastic	* Upon request				
✓	Metal								
✓	Plastic								
<b>Heavy (Mini)</b>	<table border="1"> <tr><td>✓</td><td>Screw Threaded</td></tr> <tr><td>-</td><td>Push Pull</td></tr> <tr><td>-</td><td>Push Lock</td></tr> </table>	✓	Screw Threaded	-	Push Pull	-	Push Lock		
	✓	Screw Threaded							
	-	Push Pull							
-	Push Lock								
<table border="1"> <tr><td>✓</td><td>Metal</td></tr> <tr><td>-</td><td>Plastic</td></tr> </table>	✓	Metal	-	Plastic					
✓	Metal								
-	Plastic								

# Retail Box Packing



# Blister Packing





Think Globally, Act Locally

## Contact Us

Luc Kan | Sales & Marketing

Email: [luc@ltw-tech.com](mailto:luc@ltw-tech.com)

Customer Service

Email: [sales@ltw-tech.com](mailto:sales@ltw-tech.com)

## Follow Us



Amphenol LTW



*Unrivaled InterConnects for Harsh Environments*