



AMPLIFIED HUMPRO™ SERIES LONG-RANGE TRANSCEIVER MODULE

The Amplified HumPRO™ Series RF transceiver module is the easiest-to-implement solution for simple long range wireless connections. Unlike other pre-certified modules, it has a **best-in-class real-world range of over 12.9km (8 miles) with sustained data rates 200 - 1,500 times higher than competing protocols.** The Amplified HumPRO's pre-compiled software supports many common use cases out-of-the-box at 50% of the total cost of implementation of comparable solutions.

Designed to transmit digital data across a long-range wireless link, the module is a completely integrated RF transceiver and processor. With a built-in frequency hopping protocol that manages all of the transmission functions, no on-chip programming is required. Simply configure a few registers with a binary command set.

BENEFITS



**EXTRAORDINARY RANGE
OVER 12.9 KM (8 MILES)**



PRE-COMPILED SOFTWARE



STANDARD UART INTERFACE



**FULLY INTEROPERABLE WITH ALL
HUMPRO™ & HUMPRC™ DEVICES
& GATEWAYS**



128-BIT AES ENCRYPTION



PRE-CERTIFIED

APPLICATIONS

✓ **ROBUST RANGE WITH NO INTERFERENCE**

✓ **INTERNET OF THINGS (IOT)**

✓ **MACHINE TO MACHINE**

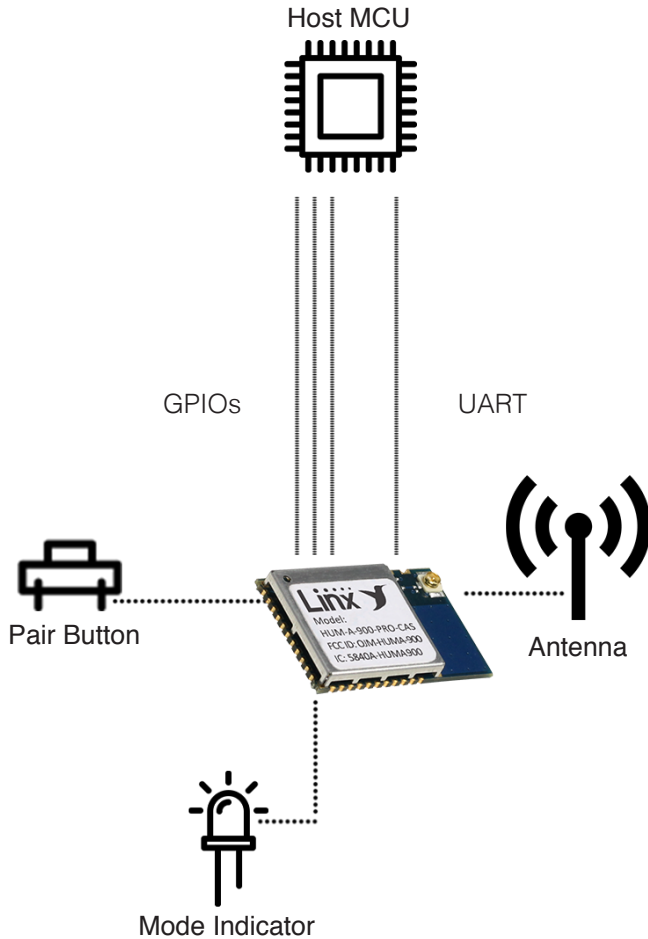
✓ **WIRELESS SENSOR NETWORKS**

✓ **REMOTE CONTROL AND STATUS MONITORING**

✓ **INDUSTRIAL AUTOMATION**

CONTACT LINX ENGINEERING FOR MORE INFORMATION

BLOCK DIAGRAM



SPECIFICATIONS

Operating Voltage	2.7 to 3.6VDC
Dimensions	25.70 x 16.66 x 2.90 mm (1.01 x 0.66 x 0.12 in)
Max Output Power	
@ 19.2kbps RF Rate	25dBm
@ 153.6kbps RF Rate	22dBm
TX Supply Current	
@ 25dBm	380mA
@ 22dBm	260mA
RX Supply Current	39mA
Power Down Current	<1μA
RX Sensitivity	
@ 19.2kbps RF Rate	-108dBm
@ 153.6kbps RF Rate	-101dBm
Operating Frequency Band	902 - 928MHz
Real-World Range	Up to 12.9km (8 miles)*
Operating Temperature Range	-40 to +85°C
*Depending on implementation and environment	

ORDERING INFORMATION

Part Number	Description
HUM-A-900-PRO-CAS	Amplified HumPRO™ Series High Power Data Transceiver, Castellation Interface, External Antenna Connection
HUM-A-900-PRO-UFL	Amplified HumPRO™ Series High Power Data Transceiver, Castellation Interface, u.FL Connector
EVM-A-900-PRO-CAS	Amplified HumPRO™ Series Carrier Board, Thru-Hole Pin Interface, RPSMA Connector
EVM-A-900-PRO-UFL	Amplified HumPRO™ Series Carrier Board, Thru-Hole Pin Interface, u.FL Connector
MDEV-A-900-PRO	Amplified HumPRO™ Series Master Development System