Application Note

Linx RF Module Identification guide

Linx radio modules are available with a variety of options and frequencies and each module's label contains an intelligent identification code. Table 1 provides the identification codes associated with each module series.

Table 1.   Module Identification Codes

Label Code	Module Series	Label Code	Module Function	Label Code	Operating Frequency
K	KH3	R	Receiver	3	315 MHz
T	LT	T	Transmitter	1	418 MHz
R	LR	X	Transceiver	4	433 MHz
C	LC	U	USB		
Q	QS				

Figure 1 shows an example identification code for the 433 MHz LR series transmitter module, TXM-433-LR, which displays the module's Series, Function, Operating Frequency, and its Manufacturing Lot Number.
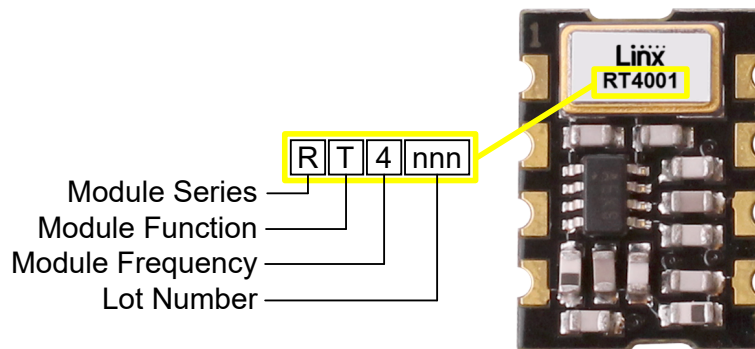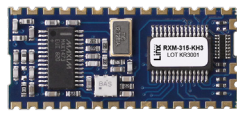

R T 4 nnn

Module Series
Module Function
Module Frequency
Lot Number
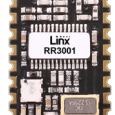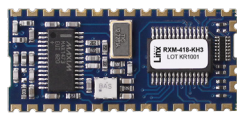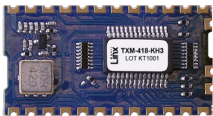
Figure 1. Module Identification Code Structure

Low Band RF Modules

Table 2 shows Linx RF modules by series and transmitter/receiver (if applicable) to support identification.

Table 2.   Low Band RF Modules (315 MHz, 418 MHz and 433 MHz)

	KH3 Series		LT Series	LR Series		LC Series	QS
	RF receiver	RF transmitter	RF transceiver	RF receiver	RF transmitter	RF transmitter	USB interface
315 MHz	RXM-315-KH3	TXM-315-KH3	TRM-315-LT	RXM-315-LR	TXM-315-LR	TXM-315-LC	SDM-USB-QS
418 MHz	RXM-418-KH3	TXM-418-KH3	TRM-418-LT	RXM-418-LR	TXM-418-LR	TXM-418-LC	
433 MHz	RXM-433-KH3	TXM-433-KH3	TRM-433-LT	RXM-433-LR	TXM-433-LR	TXM-433-LC	

Hummingbird Modules

The Hummingbird (HUM) family of modules share physical module designs, while offering a variety of features based on firmware programming. For this reason HUM modules will look similar in overall appearance, but have different labels.

HumPRO Series Labeling

The HumPRO series modules include the Amplified HumPRO, HumPRO and HumPRC modules, each offered in 915 MHz and 868 MHz, and in versions that are pre-certifed to regional requirements or uncertified. The 868 MHz modules cannot be pre-certified due to EU regulations. End products go through system level testing and have a Declaration of Conformance.

HumPRO series modules use a common code base, where encrypted remote control and user-data applications will work together under the same wireless communication platform. The difference in firmware between the HumPRO and HumPRC is the digital pins and pin logic algorithm. For this reason, the 900 MHz pre-certified HumPRO and HumPRC modules share the same FCC/IC identification under a common model number, which is printed on the label as required for regulatory purposes as shown in Figure 2. The only difference between the labels is that the HUM-900-PRC-CAS and HUM-900-PRC-UFL modules are identified by the "PRC" marking under the Hummingbird logo.

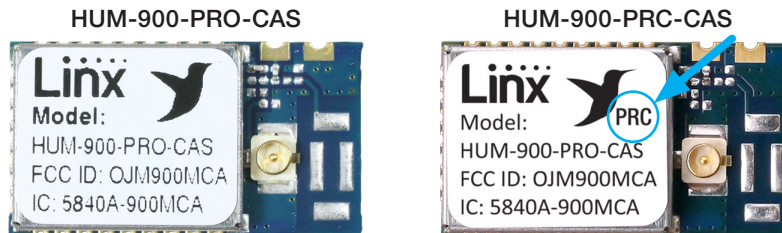HUM-900-PRO-CAS   HUM-900-PRC-CAS

Figure 2. HumPRO and HumPRC Labeling Difference on Pre-certified Modules

The HUM-900-PRO and HUM-900-PRC uncertified modules each have the identifier next to the Hummingbird logo as shown in Figure 3, denoted as "PRO" and "PRC" respectively.
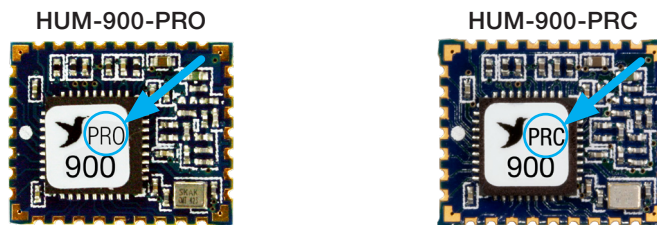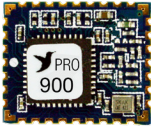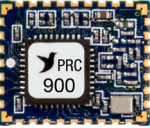
HUM-900-PRO   HUM-900-PRC

Figure 3. HumPRO and HumPRC Labeling Difference on Uncertified Modules

900 MHz HumPRO Series Modules

The 900 MHz HumPRO series, shown in Table 3, includes remote control and data communications under the same code base and platform in a single application.

Table 3.   900 MHz HumPRO Series

Amplified HumPRO™ • FCC/IC pre-certified • Long range FHSS RF transceiver • Data module	HumPRO™ • FCC/IC pre-certified • FHSS RF transceiver • Data module	HumPRO™ • Non-certified • FHSS RF transceiver • Data module	HumPRC™ • FCC/IC pre-certified • FHSS RF transceiver • Remote control module	HumPRC™ • Non-certified • FHSS RF transceiver • Remote control module
HUM-A-900-PRO-CAS	HUM-900-PRO-CAS	HUM-900-PRO	HUM-900-PRC-CAS	HUM-900-PRC
HUM-A-900-PRO-UFL	HUM-900-PRO-UFL		HUM-900-PRC-UFL	

868 MHz HumPRO Series Modules

The 868 MHz HumPRO series, shown in Table 4, includes remote control and data communications under the same code base and platform in a single application. The 868 MHz HumPRO and HumPRC series modules do not require an EU identification number, and therefore do not share a common model number.
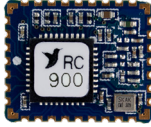
Table 4.   800 MHz HumPRO Series

HumPRO™ • CE approved LBT + AFA • RF transceiver • Data module	HumPRO™ • LBT + AFA • RF transceiver • Data module	HumPRC™ • CE approved LBT + AFA • RF transceiver • Remote control module	HumPRC™ • LBT + AFA • RF transceiver • Remote control module
HUM-868-PRO-CAS	HUM-868-PRO	HUM-868-PRC-CAS	HUM-868-PRC
HUM-868-PRO-UFL		HUM-868-PRC-UFL	

HumRC Series Modules

Labeling for the HumRC series modules is shown in Table 5.

Table 5.   900 MHz and 2.4 GHz RC Series

HumRC ™ • FCC/IC Pre-certified • FHSS RF transceiver • Remote control module	HumRC ™ • Non-certified • FHSS RF transceiver • Remote control module	HumRC ™ • Non-certified • FHSS RF transceiver • Remote control module
HUM-900-RC-CAS	HUM-900-RC	HUM-2.4-RC
HUM-900-RC-UFL		

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