# COURIER® M2M 3G CELLULAR MODEM Accessories

CELLULAR M2M

SIM Cards are available for AT&T, Rogers, and Vodafone networks around the world with optional SIM activation at time of shipment or manual activation via online portal access. Add additional mobile capabilities with a GPS antenna, a GSM Diversity Antenna, and a DC Cable that allows easy connection to automotive or other DC power sources. Add Ethernet capability to the USR3500 Cellular Modem with this Expansion Card to connect 10/100 Ethernet devices.

# **USRobotics**®

A Division of UNICOM®Global

## USR3506-ETH Ethernet Expansion Kit

#### PACKAGE CONTENTS

- · Ethernet Expansion Card
- · Backplate and spring contacts
- RJ45 Interface Cable



#### FEATURES AND SERVICES

- IEEE 802.3 Compatible
- · Integrated MAC and 10 BASE-T PHY
- Receiver and collision squelch circuit
- Supports one 10BASE-T port
- · Supports Full and Half-Duplex modes
- · Shielded RJ-45

# USR3506-ACC Mobile Accessory Kit

#### PACKAGE CONTENTS

- DC Cable
- GPS Antenna
- GSM Antenna



### USR3505-XXX SIM Cards

ATT - AT&T, North America

ROG - ROGERS, CANADA

VOD - VODAONE, GLOBAL

ACT - ACTIVATION



DC Cable			
Length		1.5M	
Terminations		10-pin Microfit female connector	
		6-wires, 50mm length, stripped & tinned	
		2@20AWG, 4@28AWG	
Fuse		2A/250V slow blow, 5*20mm, replaceable	
Diversity Antenna*			
Antenna Size [W x L x H]		18.4 x 8.0 x 49.5mm	
Frequency Range supported [MHz]		850 / 900 / 1800 / 1900 / 2100	
Connector		SMA (Male)	
Max Gain [dBi]	824 - 960 MHz	1.0 (peak), -0.5 (min)	
	1710 - 1990 MHz	2.0 (peak), 0.5 (min)	
	1920 – 2170 MHz	2.5 (peak), 2.0 (min)	
Efficiency [%] / [dB]	824 - 960 MHz	65 / -1.8 (peak), 50 / -3.0 (min)	
	1710 - 1990 MHz	65 / -1.8 (peak), 50 / -3.0 (min)	
	1920 – 2170 MHz	65 / -1.8 (peak), 50 / -3.0 (min)	
Return loss min. [dB]	824 - 960 MHz	-4	
	1710 - 1990 MHz	-6	
	1920 – 2170 MHz	-6	
Impedance		50Ω	
Electrical Length		¹∕₄λ	
Operating Temperature [°C]		-40 to +85	

* Diversity Antenna	specifications	are typcial c	and may vary.
---------------------	----------------	---------------	---------------

Weight	< 110 grams	
Antenna Size	49x39x14mm	
Cable	RG174/U 3 meters	
Connector	MMCx m. right angle	
Mounting	Magnetic base	
Housing	Black	
Center Frequency	1575.42MHz ± 3 MHz	
V.S.W.R	1.5:1	
Band Width	±5 MHz	
Impedance	50Ω	
Peak Gain	> 3dBic Based on 7x7cm ground plane	
Gain Coverage	> -4dBic at -90° < 0 < +90° (over 75% Volume)	
Polarization	RHCP	
LNA Gain (without cable)	28dB (typical)	
Noise Figure	1.5dB	
Filter Out Band Attenuation	7dB Min f0+/-20MHZ	
(f0=1575.42 MHZ)	20dB Min f0+/-50MHZ	
	30dB Min f0+/-100MHZ	
V.S.W.R	< 2.0	
DC Voltage	3.0V to 5.0V	
DC Current	10mA Max	
Operating Temp [°C]	-40 to +85	
Weatherproof	100% Waterproof	

