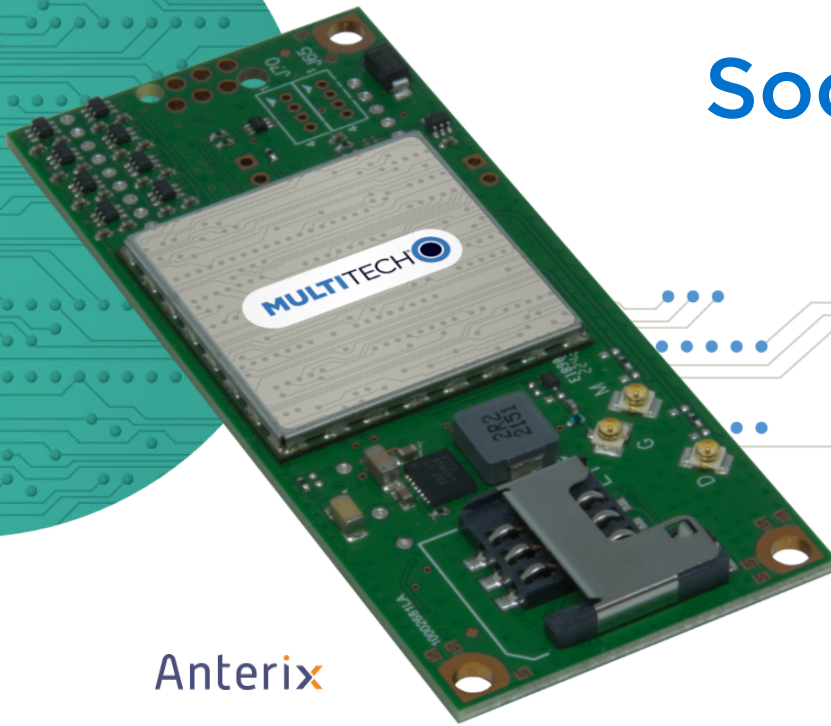


## SocketModem® Cell

Embedded Cellular Modems  
4G-LTE Models



Anterix

### BENEFITS

- Approved by carriers and regulatory agencies saving customers time, money, and protection from the risks associated with pursuing their own certifications
- Quick to market leveraging MultiTech's approvals
- Interchangeable communications devices for easy migration to future networks
- Long solution lifecycle reduces redesign time and cost
- Support from leading experts in IoT/M2M technology

### FEATURES

- 4G Models (Cat 4, Cat 1 and Cat M1)
- Global capable Cat 4, Cat 1 and Cat M1/NB-IoT models
- Integrated GNSS/GPS receiver
- Anterix 900 MHz Network Capable
- Short Message Services (SMS)
- Serial or USB interfaces
- Serial interface supports speeds up to 921.6K bps
- AT command compatible
- USB 2.0 HS compatible
- Two-year warranty

The SocketModem® Cell embedded cellular modem is a complete, ready-to-integrate communications device ideal for customers looking to add 4G-LTE cellular communications to their IoT/M2M solutions. These communications devices enable easy technology transitions and allow developers to add wireless communication to products with a minimum of development time and expense. The SocketModem Cell embedded cellular modems are carrier approved and end-device certified, decreasing time to market while saving customers money.

### Your Devices & Data



### Connecting Your Devices



### Insight + Action + Control



# HIGHLIGHTS

## Power Saving Modes (Cat M1 Models)

Extended Discontinuous Reception (eDRX) mode increases the length of time the end device can sleep before it has to check in with the network which saves power. Power Saving Mode (PSM) allows the device to notify the network it is going to sleep or dormant indefinitely only waking up based on user defined timer. Once the device wakes up and transmits it will stay awake for a few frames of time in case the network needs to reach that device. A device using PSM transmitting a small amount of data once per day could last many years using 2 AA batteries. (Note: Some power saving modes will be available in a future firmware release.)

## SPECIFICATIONS

Models	MTSMC-L4G1 MTSMC-L4G1-U	MTSMC-L4N1 MTSMC-L4N1-U	MTSMC-L1G2D MTSMC-L1G2D-U
Performance	LTE 3GPP Release 11 (Category 4; 150 Mbps peak downlink/ 50 Mbps peak uplink) with HSPA and 2G Fallback	LTE FDD Cat.4, 3GPP release 10 compliant (Category 4; 150 Mbps peak downlink/ 50 Mbps peak uplink) with 3G Fallback	LTE 3GPP Release 10 (Category 1; 10 Mbps peak downlink/ 5 Mbps peak uplink) with 3G/2G Fallback
Frequency Bands (MHz)	<b>4G FDD:</b> B1(2100), B2(1900), B3(1800), B4(AWS1700), B5(850), B7(2600), B8(900), B12/B13(700), B18(850), B19(850), B20(800), B25(1900), B26(850), B28(700) TDD: B38(2600), B39(1900), B40(2300), B41(2500) <b>3G:</b> B1(2100), B2(1900), B4(AWS1700), B5(850), B6(800), B8(900), B19(850) <b>2G:</b> B2(1900), B3(1800), B5(850), B8(900)	<b>4G:</b> B2(1900), B4(AWS1700), B5(850), B12(700a), B13(700c), B14(700 FirstNet),† B66(AWS-3 1700), B71(600) AT&T: B2, B4, B5, B12, B14 Verizon: B4, B13 <b>3G:</b> B2(1900), B4(AWS1700), B5(850)	<b>4G:</b> B1(2100), B2(1900), B3(1800), B4(AWS1700), B5(850), B7(2600), B8(900/Anterix), B9(1800), B12/B13(700), B14(700), B18(850), B19(850), B20(800), B25(1900), B26(850), B28(700) <b>3G:</b> B1(2100), B2(1900), B4(AWS1700), B5(850), B6(850), B8(900), B19(850) <b>2G:</b> B2(1900), B3(1800), B5(850), B8(900)
SMS	Mobile Originate, Mobile Terminated and Cell Broadcast / PDU or Text Mode		
USB	USB 2.0 high speed compatible (-U Models)		
TCP/IP Functions*	FTP, HTTP, SMTP, TCP, UDP, SSL		
Connectors	Antenna : 3 UFL (Cellular, Rx Diversity/MIMO, GPS) / Mini SIM (2FF); 1.8V & 3V		
Dimensions	3.15" x 1.375" (80.010 mm x 34.925 mm)		
Power Draw*	Serial Model @ 5VDC; 22.6mA sleep, 46mA idle, 562mA average at max power USB Model @ 5VDC; 46mA idle, 577mA average at max power	Serial Model @ 5VDC; 4mA sleep, 20mA idle, 615mA average at max power USB Model @ 5VDC; 21mA idle, 672mA average at max power	Serial Model @ 5VDC; 22mA sleep, 31mA idle, 570mA average at max power USB Model @ 5VDC; 45mA idle, 560mA average at max power
Input Power	3.3V - 5VDC		
Environmental			
Operating Temperature	-40° C to +85° C (-40° F to +185° F)		
Storage Temperature	-40° C to +85° C (-40° F to +185° F)		
Relative Humidity	20% to 90% RH noncondensing		
Certifications			
EMC/Radio Compliance	FCC, IC, RED, RCM	FCC, IC	FCC, IC, RED, RCM
Safety	UL/cUL 60950-1 2nd ED, IEC 60950-1 2nd ED	UL/cUL 60950-1 2nd ED	UL/cUL 60950-1 2nd ED, IEC 60950-1 2nd ED
Network	PTCRB		
Carrier	AT&T, Verizon		
Warranty	2-Years / <a href="http://www.multitech.com/legal/warranty">www.multitech.com/legal/warranty</a>		

\* See device guides or AT command guides for additional information.

† All future end-user (OEM) devices will and must go through FirstNet certification prior to being included in the FirstNet device ecosystem.

## Developer Kits

The Developer Kits allow you to plug in the communications device and use it for testing, programming and evaluation.

The MTUDK2-ST-CELL developer kit is designed to work with all of our cellular SocketModem® Cell and Dragonfly™ cellular modems.

Developer kits include a development board and all the necessary accessories to get you up and running right out of the box.

## SPECIFICATIONS

Models	MTSMC-MNG2 MTSMC-MNG2-U	MTSMC-MNA1 MTSMC-MNA1-U
Performance	LTE 3GPP Release 13 (Category M1; Up to 300 Kb/s Downlink Up to 375 Kb/s Uplink NB1; Up to 250 Kb/s Downlink (multi-tone) Up to 20 Kb/s Uplink (single-tone))	LTE 3GPP Release 13 (Category M1; Up to 300 Kbps downlink & up to 375 Kbps uplink)
Frequency Bands (MHz)	<b>4G:</b> B1(2100)/B2(1900)/ B3(1800)/B4(AWS1700)/ B5(850)/B8(900)/ B12(700)/B13(700)/ B18(800)/ B19(800)/ B20(800)/B26(850)/ B28(700)/ B39(1900) <b>2G:</b> B2(1900)/B3(1800)/ B5(850)/B8(900)	<b>AT&amp;T:</b> B12(700), B4(AWS1700), B2(1900) <b>Verizon:</b> B13(700), B4(AWS1700)
SMS	Mobile Originate, Mobile Terminated and Cell Broadcast / PDU or Text Mode	
USB	USB 2.0 high speed compatible (-U Models)	
TCP/IP Functions	FTP, HTTP, SMTP, TCP, UDP, SSL	
Connectors	Antenna: 2 UFL (Cellular, GPS) Mini SIM (2FF); 1.8V & 3V	
Dimensions	3.15" x 1.375" (80.010 mm x 34.925 mm)	
Power Draw*	Serial Model @ 5VDC; 6mA sleep, 14mA idle, 191mA average at max power  USB Model @ 5VDC; sleep N/A, 27mA idle, 205mA average at max power	Serial Model @ 5VDC; 9mA sleep, 14mA idle, 122mA average at max power  USB Model @ 5VDC; sleep N/A, 28mA idle, 151mA average at max power
Input Power	3.3V - 5VDC	
<b>Environmental</b>		
Operating Temperature	-40° C to +85° C (-40° F to +185° F)	
Storage Temperature	-40° C to +85° C (-40° F to +185° F)	
Relative Humidity	20% to 90% RH noncondensing	
<b>Certifications</b>		
EMC/Radio Compliance	FCC, IC, RED, RCM	FCC, IC
Safety	UL/cUL 60950-1 2nd ED, IEC 60950-1 2nd ED	UL/cUL 60950-1 2nd ED
Network	PTCRB	
Carrier	AT&T, Verizon	
Warranty	2-Years / <a href="http://www.multitech.com/legal/warranty">www.multitech.com/legal/warranty</a>	

\* See device guides or AT command guides for additional information.