

# LitePoint IQcell LTE Turnkey Solution

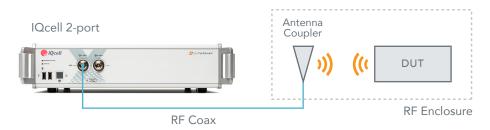
LTE is rapidly being adopted in mission-critical IoT applications such as health monitoring, automotive connectivity, industrial automation and smart city deployment.

Continuous, reliable data connection is essential, as any drop in data connection can result in serious consequences. The IQcell LTE Turnkey solution offers a quick, simple, and accurate approach to testing the quality of the LTE connection in the IOT device.



# Turnkey solution system

Based on the IQcell 2-port configuration, LitePoint has developed an integrated test system that provides rapid quality assessment of the LTE module in your IoT device. The solution is easy to setup and intuitive to run. No test script development is required, as all necessary scripts are provided with the LTE Turnkey solution.



## True end-user experience testing

The test system performs actual signaling testing, which simulates true live-network scenarios. You can directly correlate your product's lab test result to its performance in the field. By performing signaling testing using IQcell, you can ensure the device's antenna is installed properly, the cellular module is assembled and calibrated correctly, your system software is loaded and running, and your device is ready for use in the intended global region.

# Auto-Sensing of DUT capability

Not sure of the LTE band and channels your IoT device supports? The innovative Auto-Sensing feature provided with the IQcell LTE Turnkey solution automatically detects your device's band capability and generates the appropriate test script.

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# Intuitive One-Button GUI

Using the LitePoint IQflowRunner software, you can run LTE testing on your device with the simple click of a button.

🕑 IQcell GUI				- 🗆 ×
ile Tool Help				
Tester is ready				Preferences Station Settings
		UNLOCKED_DUT AMERICA_VER_FLOW	1	
		START TEST		
		SN		
Log				
Completed: 0%	IMSI:	UE State:	Loop: 1	Test Time: 0 second
				,

The test result is a straightforward pass or fail.

Address of the second s				
ile Tool Help				
Tester is ready				Preferences Station Setting
		UNLOCKED_DUT		
and the second second second		AMIRICA_VER_FLOW		
		START TEST		
and the second second				
		V2_M#(363%		
log				
Completed: 100%	MISE 001010123456789	UE State: THEPSACT	Loop: 1	Test Time: 38 seco
12.80_TEST_BAND 13_CHANNEL_ ERROR_MESSAGE	23230 :[Info] Test Completed.			
13.LTE_OQC_TEST_BAND_13_CHA BCX NRCX PER_	588	(475,) (0,) ×(0.90,5.00)		
RERP TPUT TX_POVER ERROR_MEESAGE	78,00 1 100.00 1 22.54 1 Infol Test Completed.	dBn (-95,00, -85,00) × (75,00, ) dBn (18,00, 28,00)		
4. CENERATE_CSU_BAND_13_CHA ERROR_MESSAGE	NNEL_23230 :0.029 s Illofe) Test Completed.			
15.DISCONNECT_19_TESTER_BAN ERROR_MESSAGE	0_13_CHANNEL_23238 :0.127 s :(Info) Test Completed.			
Total Ban(s) Passed Ban(s) Pailed Ban(s) on Limits Pailed Ban(s) on Errors In This Ben:	11 11 10 10			
Fail(s) on Limits Fail(s) on Errors Flow Run Time Test Function Time	18 18 129,836 s 119,667 s			
PPPTPTPTPTPTPTPT AA PPTTPTPTPTPTPT AA PPTTPTPTPTPTPTPTPTP PPTTPTPTPTPTPTPTP			E E E DE E E E DE E E E DE E E E E DE E E E E E E E E E E E E E E E E E E E	
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PILIP ATTIARSARSA PILIPP ATTIA	ARIARA :::::A SSESSE \$::::: A::::A SSESSE \$::::: A::::A SSESSE :::::::	S SSSSSSS S S SSSSSSSSSSSSSSSSSSSSSSSS	EFFEFE D::::D D::::D EDDD::::DDD::::DD EDDD::::DDD	
P::::P7PP7P::::PA::::A P::::P7PP7P7P7 A:::A P::::P7PP7P7P7P A:::A P::::P A:::::AAAAA P::::P	A		LELE D::::D D::::D   10 10 10 10   110 10 10 10   110 10 10 10   111 10 10 10   112 10 10 10   111 10 10 10   111 10 100 10	

### Comprehensive test cases

The included test cases provide an assessment of the quality of your LTE module, and ensure appropriate test coverage and test efficiency.

#### **Transmitter tests**

- 1. Max Output Power Determines if the device is able to transmit the appropriate output level
- 2. Tx Quality Checks the quality of the modulated transmit signal

#### **Receiver tests**

- 1. Rx BER Checks the quality of the receiver by measuring how well it demodulates the input signal
- 2. Receive Signal Strength Indicator (RSSI) Checks the accuracy of the received signal strength reading across the dynamic range, down to the sensitivity level

## Ordering and Configuration

The following license bundle constitutes the IQcell Turnkey solution.

Part Number	Description
0100-CELL-002	IQcell Test System – 2 port, Includes IQOperator Software
0150-CEL-002 / 0150-CELL-003	Test SIM Card Dual 2FF & 3FF / Test SIM Card Nano 4FF
0300-CELL-003	LTE Signaling SW License



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