



# KENKUL

## 4G-LTE IP Modem Data Terminal Unit

### F2816 4G-LTE Data Terminal Unit

- Fully Compatible with 4G-LTE/3G/2.5G Network
- Ultra-Low Power Consumption
- Integration Terminal Data Transparent Transmission
- Save the Data Flow, Support Multiple Trigger Ways
- SMS Backup
- Remote Configuration, Upgrade and Maintenance, Greatly Improve Management Efficiency
- Providing Much More Safe Deployment Plans, Data Transmission Reaching Financial Level.



### Feature



#### Ultra-Low Power Consumption

Using multi-level sleep and wake-up mode. The power consumption at mode of working, standby, and sleep [sleep consumption <math><5\text{mA}</math>] are lower than similar products in the industry, show evident advantage in the situation when inconvenient to get powered.



#### Fully Compatible with 4G/3G/2.5G Network

All models fully compatible with all 4G/3G/2.5G communication network, make more options for client's project construction. The speed of transmission increase 5 times than former terminal, which enable the big data faster.



#### Save the Data Flow

Support multiple trigger ways, including SMS, ring, and serial port data trigger online or offline mode, can reduce the power consumption effectively and avoid the waste of data flow consumption.



#### SMS Backup

When online wireless network signal or center network fail to work, it can automatic switch into GSM and to send or receive data (data and SMS are back-up for each other, switch freely).

[www.kenkul.com.tw](http://www.kenkul.com.tw)  
[www.kenkul.weebly.com](http://www.kenkul.weebly.com)



# Specification

## F2816 IP Modem Cellular Specification

Item	Content
Cellular Module	Industrial cellular module
Standard and Band	UMTS/WCDMA/HSDPA/HSUPA 850/1900/2100MHz, 850/900/1900/2100MHz(optional) GSM850/900/1800/1900MHz WCDMA/HSDPA/HSUPA/EDGE CLASS 12
Bandwidth	HSDPA:7.2Mbps(DL),HSUPA:5.76Mbps(UL) UMTS:384Kbps (DL), 384Kbps (UL)
TX power	<24dBm
RX sensitivity	<-109dBm

## Hardware System

Item	Content
CPU	Industrial 32 bits CPU
FLASH	512KB (Extendable)
SRAM	256KB

## Interface Type

Item	Content
Serial	2 RS232 port and 1 RS485(orRS422) port, 15KV ESD protection Data bits: 5, 6 ,7, 8 Stop bits: 1, 1.5, 2 Parity: none, even, odd, space, mark Baud rate: 110~230400 bps
Indicator	"Power", "ACT", "Online"
Antenna	Standard SMA female interface, 50 ohm, lightning protection(optional)
SIM/UIM	Standard 3V/1.8V user card interface, 15KV ESD protection
Power	Terminal block interface, reverse-voltage and overvoltage protection

## Power Input

Item	Content
Standard Power	DC 12V/0.5A
Power Range	DC 5~36V

## Power Consumption

Working States	Power Consumption	
Communication	95~165mA@12VDC	205~365mA@5VDC
Standby	40~50mA@12VDC	80~100mA@5VDC
Sleep	5mA@12VDC	6mA@5VDC

## Physical Characteristics

Item	Content
Housing	Iron, providing IP30 protection
Dimensions	91x58.5x22 mm
Weight	205g

## Environmental Limits

Item	Content
Operating Temperature	-35~+75°C (-22~+167°F)
Storage Temperature	-40~+85°C (-40~+185°F)
Operating Humidity	95% ( unfreezing)

