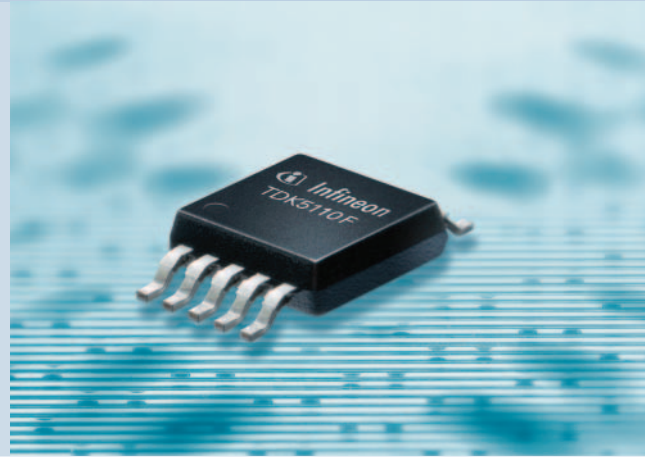


# TDK511xF Series

High Power 315/434/868 MHz,  
ASK/FSK Transmitters (-40 ... +125°C)



**WIRELESS CONTROL** – The TDK511xF series is a family of high power ASK/FSK transmitters for the frequency bands 311 – 317 MHz, 433 – 435 MHz and 868 – 870 MHz. The IC offers a high level of integration and needs only a few external components. The device contains a fully integrated PLL synthesizer and a high efficiency power amplifier to drive a loop antenna. A special circuit design and a unique power amplifier design are used to save current consumption and therefore to save battery life. Additional features like power down mode and divided clock output are implemented. The IC can be used for both ASK and FSK modulation.

## Applications

- Remote Keyless Entry (RKE) systems
- Tire Pressure Monitoring (TPM) systems
- Remote control systems
- Alarm systems
- Communication systems

## Ordering Information

Type	Ordering Code	Package
TDK5110F	SP000056180	PG-TSSOP-10
TDK5111F	SP000056181	PG-TSSOP-10
TDK5116F	SP000056182	PG-TSSOP-10

## Evaluation Kits

Type	Modulation	Frequency	Ordering Code
TDK5110F-TDA5210	FSK	434 MHz	SP000086722
TDK5111F-TDA5211	FSK	315 MHz	SP000086723
TDK5116F-TDA5210	FSK	868 KHz	SP000087099

## Features

- Frequency range  
311 – 317 MHz/433 – 435 MHz/868 – 870 MHz
- ASK and FSK modulation
- High efficiency power amplifier typically  
10 dBm @ 3 V
- Fully integrated frequency synthesizer
- VCO without external components
- Fully integrated frequency synthesizer
- Power down mode
- Divided clock output for  $\mu$ C
- Low external component count
- Integrated FSK-switch
- Low supply current typ. 14 mA @ 3 V
- Voltage supply range 2.1 – 4 V
- Temperature range -40 ... +125°C

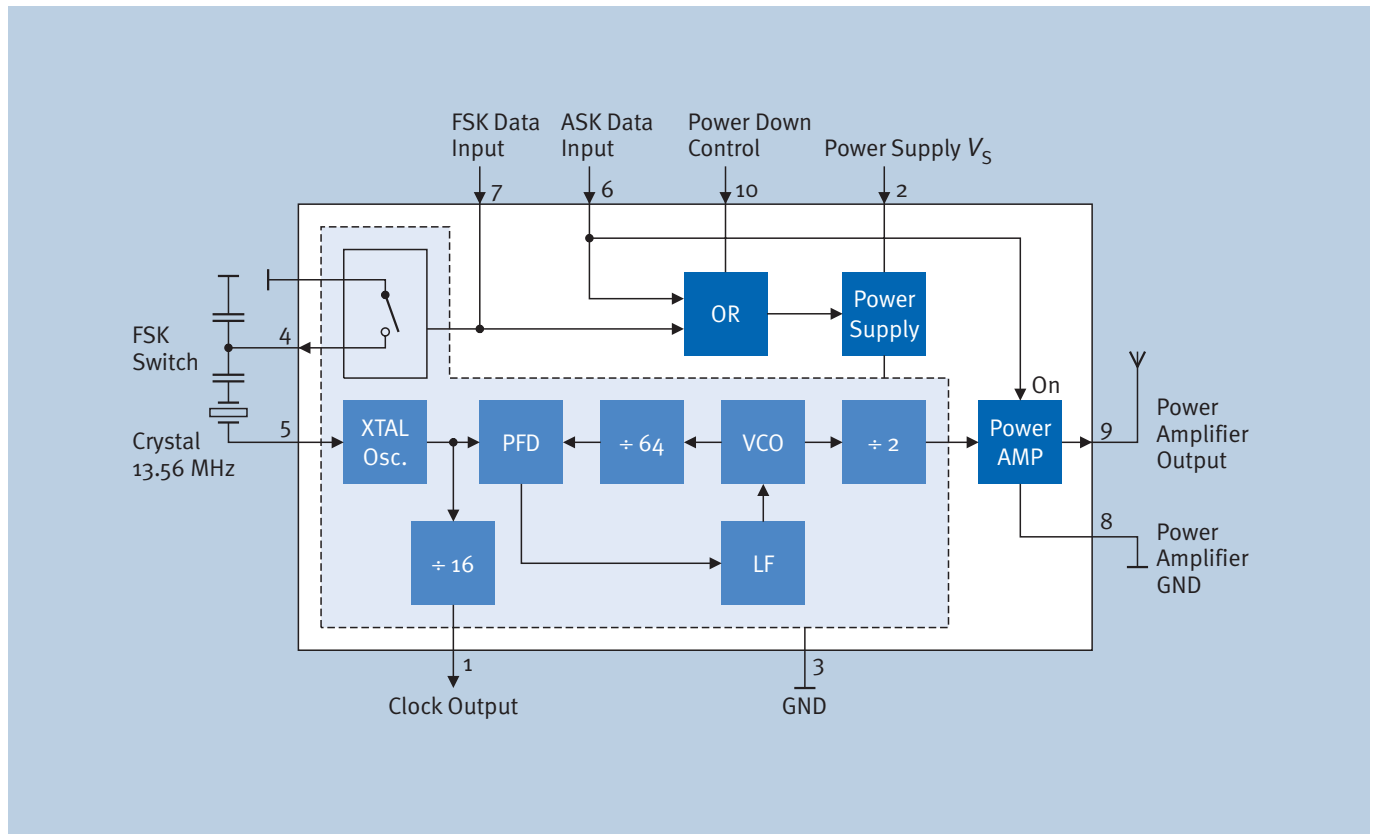
[www.infineon.com/wireless](http://www.infineon.com/wireless)

# Wireless Control



Never stop thinking

## Block Diagram TDK5110F



Type	TDK5110F	TDK5111F	TDK5116F
Frequency Range	433 – 435 MHz	311 – 317 MHz	868 – 870 MHz
Data Rate	20 kHz (ASK/FSK)	20 kHz (ASK/FSK)	20 kHz (ASK/FSK)
Supply Voltage	2.1 – 4 V	2.1 – 4 V	2.1 – 4 V
Supply Current typ. (PLL Enable Mode/Transmit Mode $V_s = 3 V$ )	4/14.2 mA	4/14 mA	4/14 mA
Power Down Current	4 $\mu A$	4 $\mu A$	4 $\mu A$
RF Transmit Power typ.	10.0 dBm	10.0 dBm	10.0 dBm
Package	PG-TSSOP-10	PG-TSSOP-10	PG-TSSOP-10
Temperature Range	-40°C ... +125°C	-40°C ... +125°C	-40°C ... +125°C

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<http://www.infineon.com>

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