

ISM Transceiver PAN2341



OUTLINES - ENW59605N

This extremely reliable module is mainly intended for the ISM (Industrial, Scientific and Medical) and SRD (Short Range Device) frequency bands at 868 and 915 MHz. Other frequency bands possible on request.

It provide a wireless radio reception and can be linked to a wide range of devices including home appliances, keyless entry and many other applications.

This module complies with EN 300-220 and FCC CFR47 part 15 and offers a low cost, fully integrated solution for many ISM-applications. Our model PAN2341 is the newest development which based on our experience from the PAN2340, but now in a smaller size.

PAN2341 is specially made for all applications where a **wide band** bidirectional data transfer is needed.

FEATURES

- Maximum datarate up to 76.8 kBaud (NRZ mode)
- Very low current consumption
- Frequency range 300 - 1000 MHz
- High sensitivity (typ. -110 dBm at 2.4 kBaud, Manchester)
- Programmable output power -20 dBm to +5 dBm
- Low supply voltage (2.1 V to 3.6 V)
- Operating temperature range -40°C to +85°C
- Small size (10.4mm x 20.0mm x 2.8mm)
- Analog RSSI output
- Single port antenna connection
- Programmable frequency in 250 Hz steps makes crystal temperature drift compensation possible

APPLICATIONS

- RKE - Two-way Remote Keyless Entry
- Home Automation Systems
- AMR - Automatic Meter Reading
- Low Power Telemetry
- Toys
- Remote Control Systems

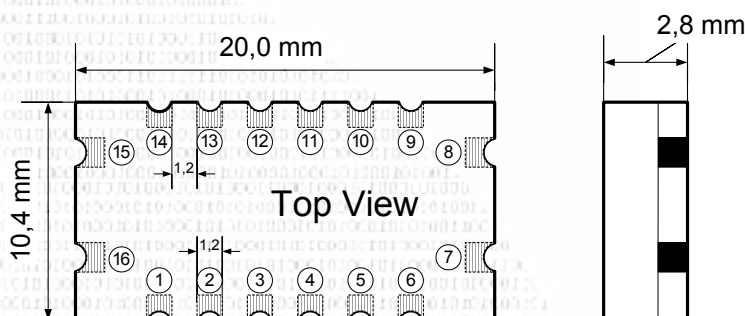
MODULES
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DIMENSIONS



Pin no.	Pin name
5,6,7,8,13,15,16	GND
1	VCC
2	CHP-OUT
3	DCLK
4	DIO
9	PALE
10	RSSI
11	PDATA
12	PCLK
14	ANT

TECHNICAL CHARACTERISTICS

Parameter	Value	Condition / Note
Receiver Sensitivity, Optimum sensitivity (11.8 mA), Low current consumption (9.6 mA)	-107 dBm -105 dBm	more details in datasheet
Output Power	-20 to 5 dBm	Delivered to 50 Ω load. The output power is programmable.
RSSI dynamic range	-105 to -50 dBm	
PLL lock time (Rx /Tx turn time)	200 μ s	up to 1MHz frequency step
PLL turn-on time, crystal oscillator on in power down mode	250 μ s	Crystal oscillator running
Power Down Mode	0.2 μ A typ.	Oscillator core off
Current Consumption receive mode	9.6 mA	Current is programmable and can be increased for improved sensitivity
Current Consumption transmit mode P=3mW (5dBm)	25.4 mA typ.	Delivered to 50 Ω load. The output power is programmable.

Note:

All parameters are valid for $V_{DD} = 3.0V$, $T_{amb} = 25^{\circ}C$ and 868MHz

If you are interest in lower frequencies, e.g. 433 MHz offers better conditions, please send an e-mail to wireless@ecom.panasonic.de.