

deRFgateway for ARM based radio modules Datasheet

- § The deRFgateway is a development and application platform for dresden elektronik radio modules based on ARM microcontroller.
- § deRFgateway supports pluggable dresden elektronik radio modules.
- § Useful for Gateway function is the onboard Ethernet interface on deRFgateway, only available in combination with ARM based radio modules.
- § The USB interface allows the radio module communication with a host PC or notebook.
- § The platform can be powered over USB, DC-Plug or battery.
- § Onboard sensors for transmission of environmental data like temperature, luminosity and acceleration.
- § Onboard memory sufficient for data storage and over-the-air firmware updates.

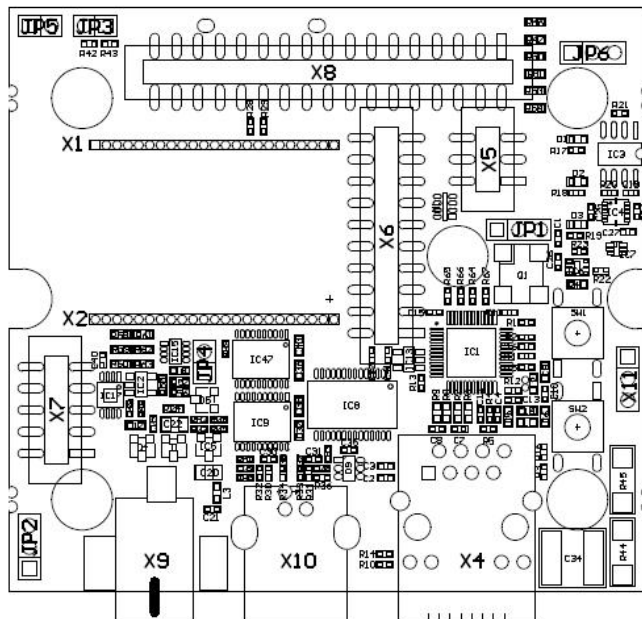


Technical Data

Dimensions	70 x 68 x 33 mm
IP protection	IP 00
Operating temperature	-40 to +85°C
Control and display elements	2x Buttons and 3x LED
Power supply	DC: 5VDC USB: 5VDC over USB Battery: 3 x AA
Power consumption	I _{idle} < 17 mA deRFgateway with deRFarm7 module and Ethernet deactivated I _{idle} = 40 mA (typ.) I _{TxRxOn} = 54 mA (typ.) deRFgateway with deRFarm7 module with Ethernet and 100BASE-TX Connection I _{idle} = 161 mA (typ.) I _{TxRxOn} = 175 mA (typ.)
Interfaces	JTAG (AVR & ARM), Debug, USB, Ethernet, I2C, UART, SPI, ADC
Onboard Sensors	Temperature, Luminosity, Acceleration
Onboard Memory	4Mbit Serial Flash
Supported Radio Modules	deRFarm7 series
Certification	CE pending (The deRFgateway is intended for laboratory, development, demonstration or evaluation purposes only)

Technical Data

Board Overlay



Top View deRFgateway

Overlay

X1 & X2: Radio Module
X4: Ethernet RJ45
X5: Debug & Trace
X6: JTAG for ARM
X7: JTAG for AVR
X8: 34 Pin User Interface
X9: DC
X10: USB Type-B

JP1: Acc. INT or SW2
JP2: Bat or DC/USB
JP3: VBAT monitor
JP4: RST Supervisor
JP5: VCC module
JP6: SW1

Scope of delivery

deRFgateway-1TNP2-00N00

Order No.

BN-031633

Accessories (optional)

RS232 level shifter
DC-Power Supply 5V / 1,2A
Suitable case for deRFgateway

BN-028560
BN-023431
coming soon

Board variants

deRFnode-1TNP2-00N00
deRFnode-2TNP2-00N00

BN-031632
BN-031634

More information about the variants are described in detail in the user manual.

Order online: <http://www.dresden-elektronik.de/shop/cat4.html>

Order Information

Variants