Our Innovations for You

ELECTRONIC PRODUCTS FOR HARVESTING APPLICATIONS

Selection of wireless equipment is dictated by the current consumption during sending and receiving information. The table lists the types of transmitters that we use. For comparison, the Energy Micro system from Draco series is shown, which will be available at the end of 2012.

Platform	Supply voltage [V]	Data <u>rate</u> [Mbps]	Max. output power [dBm]	Sensitivity [dBm]	RX <u>current</u> [<u>m</u> A]	TX <u>current</u> [mA]
EFR4D Draco		4	13	-101	4	6 [mA] @ 0 [dBm]
nRF24L01+	1.9 - 3.6	2	0	-94	13.5	11.3 [mA] @ 0 [dBm]
A7153	2 - 3.6	250	3.5	-96	18.5	15 [mA] @ 0 [dBm]
RFM70	1.9 – 3.6	2	5	-88	18	17 [mA] @ 0 [dBm]
CC2500	1.8 - 3.6	500	1	-104	13.3	21.2 [mA] @ 0 [dBm]
CYRF69213	1.8 - 3.6	1	4	-97	18.4	26.2 [mA] @ 0 [dBm]



System integrator of wireless harvesting nodes:

- one receiver allows operation of the programmed number of harvesting nodes,
- data are transmitted from the receiver to the management software,
- receiver may also be a web server.



Contact person:

Przemysław Wiewiórski przemyslaw.wiewiorski@pwr.wroc.pl Continuum Mechanics Division Wroclaw University of Technology (WRUT) Software allows you to monitor the parameters provided by sensors through the website, or in service mode from 14 sensors. The software is designed to support systems with the ADIS16488 module.



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