

EM3011

WalkBy System

Technical description

WalkBy Mobile Reading System is one of the methods for collecting data from various measuring devices equipped with EcoMatrix RF radio modules. In this mode, a user either walking or driving along a predefined route receives data on a tablet or laptop connected to an RF Terminal EM3011 receiver and running dedicated software. The collected data is then transmitted via the Internet to the system server for further processing.

This solution does not require access to premises where the devices are installed the reading is performed within a few seconds from a distance of 50 to 200 meters from the meter installation site. The retrieved data logs can be saved in MS Excel format for further use by external applications.



Using the RF Terminal EM3011 and specialized software, it is also possible to program the parameters of EcoMatrix equipment via the RF radio channel, as well as to retrieve archived measurement data stored in the RF modules.

Data reading terminal (Ver 6.0)

Date / Time	Module ID	Parameter ID	Factor	Parameter type	Value	Units	Source	ReadTime	RSSI, dB
08-02-2023 16:00	3017800	4012104	0.2	W aneexp (hour)	0.2160	kWhour	RF Module	08-02-2023 17:17:09.982	-21.5
08-02-2023 16:00	4014208	4014212	0.2	W aneexp (hour)	0.0932	kWhour	RF Module	08-02-2023 17:17:22.890	-52.5
07-02-2023	4014208	4014218	0.2	W aneexp (day)	1.4008	kWhour	RF Module	08-02-2023 17:17:23.878	-51.5
08-02-2023 16:00	3018020	3018024	0.2	W aneexp (hour)	0.1420	kWhour	RF Module	08-02-2023 17:17:32.829	-21.5
08-02-2023 15:00	3018020	3018026	50	W aneexp (hour)	34.9000	kWhour	RF Module	08-02-2023 17:17:32.829	-21.5
07-02-2023	3018020	3018028	0.2	W aneexp (day)	3.0656	kWhour	RF Module	08-02-2023 17:17:33.815	-25.5
08-02-2023 17:16	3017820	3017826	0.2	W elect	450.0160	kWh	RF Module	08-02-2023 17:17:56.192	-31
08-02-2023 17:12	4015108	4015108	10	V cold water	642.0400	m cube	RF Module	08-02-2023 17:17:56.256	-18.5
08-02-2023 17:12	4015108	4015109	10	V hot water	499.0000	m cube	RF Module	08-02-2023 17:17:56.256	-18.5
08-02-2023 17:12	4015108	4015110	0.025	W elect	1.546.0000	kWh	RF Module	08-02-2023 17:17:56.256	-18.5
08-02-2023 17:12	4015108	4015111	10	V gas	146.0000	m cube	RF Module	08-02-2023 17:17:56.256	-18.5
08-02-2023 17:14	4014292	4014292	1	W elect	19.244.0050	kWh	RF Module	08-02-2023 17:17:57.490	-57.5
08-02-2023 17:14	4014292	4014293	5	W elect	24.768.0050	kWh	RF Module	08-02-2023 17:17:57.490	-57.5
08-02-2023 17:14	4014292	4014294	5	W elect	40.708.0050	kWh	RF Module	08-02-2023 17:17:57.490	-57.5
08-02-2023 17:15	3018030	3018031	0.625	W elect	90.203.0419	kWh	RF Module	08-02-2023 17:17:57.621	-62.5
08-02-2023 17:15	3018020	3018026	50	W elect	117.028.3199	kWh	RF Module	08-02-2023 17:17:57.621	-62.5
08-02-2023 16:53	3018020	3018020	0.2	W elect	558.7758	kWh	RF Module	08-02-2023 17:17:57.826	-20
08-02-2023 16:53	3018020	3018022	50	W elect	667.607.4000	kWh	RF Module	08-02-2023 17:17:57.826	-20
08-02-2023 17:04	4014208	4014208	0.2	W elect	496.7418	kWh	RF Module	08-02-2023 17:17:57.884	-57.5
08-02-2023 17:15	3017740	3017740	0.2	W elect	0.0000	kWh	RF Module	08-02-2023 17:17:58.922	-36
08-02-2023 17:15	4014172	4014172	0.2	W elect	5.696.0954	kWh	RF Module	08-02-2023 17:18:00.615	-34.5
08-02-2023 17:15	4014436	4014436	0.2	W elect	877.0702	kWh	RF Module	08-02-2023 17:18:02.615	-37.5
08-02-2023 17:15	3017800	3017800	0.2	W elect	1.759.9224	kWh	RF Module	08-02-2023 17:18:04.968	-19

Connection settings: IP: 193.23.14.205, Port: 3209, ID: 537428, COM78, COM79, COM80, COM81, COM82, COM83, COM84, COM85, COM86, COM87, COM88, COM89, COM90, COM91, COM92, COM93, COM94, COM95, COM96, COM97, COM98, COM99, COM100.

COM port settings: Clear list, Load from file, Export to Excel, Send data, RF Terminal, RF/GPRS Terminal.

19:00:39



Technical specifications Em3011:

Description	RF Terminal EM3011
Box Size	85x45x20mm
Unit Weight	70 g
Power Supply	5.0 VDC (from USB)
RF frequencies (ranges)	FSK 430/868/900 MHz
Environmental	IP-65
Operating Temperatures	-20° C Δo +60° C
Humidity	90%

RF Terminal EM3011

Module ID	Parameter ID	Factor	Parameter type	Value	Units	Source	ReadTime	RSSI, dB
15:00	3017800	3017804	0.2	W aneexp (hour)	0.2160	kWhour	RF Module	08-02-2023 17:17:09.982
16:00	4014208	4014212	0.2	W aneexp (hour)	0.0932	kWhour	RF Module	08-02-2023 17:17:22.890
16:00	4014208	4014218	0.2	W aneexp (day)	1.4008	kWhour	RF Module	08-02-2023 17:17:23.878
15:00	3018020	3018024	0.2	W aneexp (hour)	0.1420	kWhour	RF Module	08-02-2023 17:17:32.829
15:00	3018020	3018026	50	W aneexp (hour)	34.9000	kWhour	RF Module	08-02-2023 17:17:32.829
15:00	3018020	3018028	0.2	W aneexp (day)	3.0656	kWhour	RF Module	08-02-2023 17:17:33.815
17:16	3017820	3017826	0.2	W elect	450.0160	kWh	RF Module	08-02-2023 17:17:56.192
17:12	4015108	4015108	10	V cold water	642.0400	m cube	RF Module	08-02-2023 17:17:56.256
17:12	4015108	4015109	10	V hot water	499.0000	m cube	RF Module	08-02-2023 17:17:56.256
17:12	4015108	4015110	0.025	W elect	1.546.0000	kWh	RF Module	08-02-2023 17:17:56.256
17:12	4015108	4015111	10	V gas	146.0000	m cube	RF Module	08-02-2023 17:17:56.256
17:14	4014292	4014292	1	W elect	19.244.0050	kWh	RF Module	08-02-2023 17:17:57.490
17:14	4014292	4014293	5	W elect	24.768.0050	kWh	RF Module	08-02-2023 17:17:57.490
17:14	4014292	4014294	5	W elect	40.708.0050	kWh	RF Module	08-02-2023 17:17:57.490
17:15	3018030	3018031	0.625	W elect	90.203.0419	kWh	RF Module	08-02-2023 17:17:57.621
17:15	3018020	3018026	50	W elect	117.028.3199	kWh	RF Module	08-02-2023 17:17:57.621
16:53	3018020	3018020	0.2	W elect	558.7758	kWh	RF Module	08-02-2023 17:17:57.826
16:53	3018020	3018022	50	W elect	667.607.4000	kWh	RF Module	08-02-2023 17:17:57.826
17:04	4014208	4014208	0.2	W elect	496.7418	kWh	RF Module	08-02-2023 17:17:57.884
17:15	3017740	3017740	0.2	W elect	0.0000	kWh	RF Module	08-02-2023 17:17:58.922
17:15	4014172	4014172	0.2	W elect	5.696.0954	kWh	RF Module	08-02-2023 17:18:00.615
17:15	4014436	4014436	0.2	W elect	877.0702	kWh	RF Module	08-02-2023 17:18:02.615
17:15	3017800	3017800	0.2	W elect	1.759.9224	kWh	RF Module	08-02-2023 17:18:04.968

Connection settings: IP: 193.23.14.205, Port: 3209, ID: 537428, COM78, COM79, COM80, COM81, COM82, COM83, COM84, COM85, COM86, COM87, COM88, COM89, COM90, COM91, COM92, COM93, COM94, COM95, COM96, COM97, COM98, COM99, COM100.

COM port settings: Clear list, Load from file, Export to Excel, Send data, RF Terminal, RF/GPRS Terminal.

19:22:46