

Date: November 21, 2010
Ref: LMA Compliance Letter
To: Federal Communications Commission

Subject: LMA compliance letter

This letter introduces ORPAK Systems Ltd request to approve it's WGT wireless RF module according to FCC Limited Modular Approval procedure, and to demonstrate the means to control the module as required by the LMA procedure.

The module WGT, (p/n 819539300 & (two) p/n 819539370) is a 2.4 GHz wireless module manufactured by ORPAK Systems Ltd. The model consists of a "PCB ASSY. WGT CPU (VIS)" and two headers for connection to both "PCB ASSY WGT RF-3 (AT)" and each one of RF boards has its own integrated onboard antenna.

This model is not sold separately, and is not installed in any units other then ORPAK's Products, and currently it is used in the following hosts: MWGT (P/N 800939300), MWGT OUTDOOR UNIT – Universal (P/N 8009393610, OrIC (P/N 800938050), and OrIC8 (P/N 800941505). MWGT (P/N 800939300) and MWGT OUTDOOR UNIT – Universal (P/N 8009393610) have various model names which are identical electronically, physically, and mechanically to the MWGT and MWGT OUTDOOR UNIT – Universal respectively. Both the OrIC and OrIC8 have various sub- configurations which differ from the main host only by software and/or extracted components/assemblies. See Orpak Systems declarations concerning additional MWGT, MWGT OUTDOOR UNIT – Universal, OrIC and OrIC8 model variations.

1) Following is the list of MWGT P/N 800939300 model names:

Product P/N	Product Name
800939301	MWGT UNIT
800939302	WGT UNIT W/P.S.
800939305	CWGT UNIT

2) Following is the list of MWGT OUTDOOR UNIT UL-W/P.S.
 P/N 800939355 model names:

Product P/N	Product Name
800939350	WGT OUTDOOR UNIT UL
800939351	MWGT OUTDOOR UNIT (GB)
800939352	CWGT OUTDOOR UNIT UL-W/P.S.
800939353	WGT OUTDOOR UNIT UL-W/P.S.
800939355	MWGT OUTDOOR UNIT UL-W/P.S.
800939356	MWGT OUTDOOR UNIT (GB-W/O P.S)
800939360	WGT OUTDOOR UNIT-UNIVERSAL
800939362	CWGT OUTDOOR UNIT-UNIVERSAL
800939363	WGT ORTC OUTDOOR
800939364	WGT ORTC (GB) OUTDOOR
800939365	MWGT ORTC OUTDOOR
800939366	MWGT ORTC (GB) OUTDOOR

3) Following is the list of OrIC, P/N 8009380850, model variations.

<i>OrIC/OrIT Main Configurations for FCC</i>	
P/N	Product Name
800938102	OrIT (E)
800938103	OrIC (E)
800938104	OrIT (2M)
800938105	OrIC (2M)
800938106	OrIT (4M)
800938107	OrIC (4M)
800938118	OrIT (E,WGT)
800938119	OrIC (E,WGT)
800938120	OrIT (2M,WGT)
800938121	OrIC (2M,WGT)
800938122	OrIT (4M,WGT)
800938123	OrIC (4M,WGT)
800938134	OrIT (E,PRN)
800938135	OrIC (E,PRN)
800938136	OrIT (2M,PRN)
800938137	OrIC (2M,PRN)
800938138	OrIT (4M,PRN)
800938139	OrIC (4M,PRN)

<i>OrIC/OrIT Main Configurations for FCC</i>	
P/N	Product Name
800938150	OrIT (E,WGT,PRN)
800938151	OrIC (E,WGT,PRN)
800938152	OrIT (2M,WGT,PRN)
800938153	OrIC (2M,WGT,PRN)
800938154	OrIT (4M,WGT,PRN)
800938155	OrIC (4M,WGT,PRN)
800938166	OrIT (E,DK)
800938167	OrIC (E,DK)
800938168	OrIT (2M, DK)
800938169	OrIC (2M, DK)
800938170	OrIT (4M, DK)
800938171	OrIC (4M, DK)
800938182	OrIT (E,WGT,DK)
800938183	OrIC (E,WGT,DK)
800938184	OrIT (2M, WGT,DK)
800938185	OrIC (2M, WGT,DK)
800938186	OrIT (4M, WGT,DK)
800938187	OrIC (4M,WGT, DK)
800938198	OrIT (E,PRN,DK)
800938199	OrIC (E, PRN,DK)
800938200	OrIT (2M, PRN,DK)
800938201	OrIC (2M, PRN,DK)
800938202	OrIT (4M, PRN,DK)
800938203	OrIC (4M, PRN,DK)
800938214	OrIT (E,WGT,PRN,DK)
800938215	OrIC (E,WGT,PRN,DK)
800938216	OrIT (2M,WGT,PRN,DK)
800938217	OrIC (2M,WGT,PRN,DK)
800938218	OrIT (4M,WGT,PRN,DK)
800938219	OrIC (4M,WGT,PRN, DK)
800938358	OrIT (O,E)
800938359	OrIC (O,E)
800938360	OrIT (O,2M)
800938361	OrIC (O,2M)
800938362	OrIT (O,4M)
800938363	OrIC (O,4M)

<i>OrIC/OrIT Main Configurations for FCC</i>	
P/N	Product Name
800938374	OrIT (O,E,WGT)
800938375	OrIC (O,E,WGT)
800938376	OrIT (O,2M,WGT)
800938377	OrIC (O,2M,WGT)
800938378	OrIT (O,4M,WGT)
800938379	OrIC (O,4M,WGT)
800938390	OrIT (O,E,PRN)
800938391	OrIC (O,E,PRN)
800938392	OrIT (O,2M,PRN)
800938393	OrIC (O,2M,PRN)
800938394	OrIT (O,4M,PRN)
800938395	OrIC (O,4M,PRN)
800938406	OrIT (O,E,WGT,PRN)
800938407	OrIC (O,E,WGT,PRN)
800938408	OrIT (O,2M,WGT,PRN)
800938409	OrIC (O,2M,WGT,PRN)
800938410	OrIT (O,4M,WGT,PRN)
800938411	OrIC (O,4M,WGT,PRN)
800938422	OrIT (O,E,DK)
800938423	OrIC (O,E,DK)
800938424	OrIT (O,2M, DK)
800938425	OrIC (O,2M, DK)
800938426	OrIT (O,4M, DK)
800938427	OrIC (O,4M, DK)
800938438	OrIT (O,E,WGT,DK)
800938439	OrIC (O,E,WGT,DK)
800938440	OrIT (O,2M, WGT,DK)
800938441	OrIC (O,2M, WGT,DK)
800938442	OrIT (O,4M, WGT,DK)
800938443	OrIC (O,4M,WGT, DK)
800938454	OrIT (O,E,PRN,DK)
800938455	OrIC (O,E, PRN,DK)
800938456	OrIT (O,2M, PRN,DK)
800938457	OrIC (O,2M, PRN,DK)
800938458	OrIT (O,4M, PRN,DK)
800938459	OrIC (O,4M, PRN,DK)

<i>OrIC/OrIT Main Configurations for FCC</i>	
P/N	Product Name
800938470	OrIT (O,E,WGT,PRN,DK)
800938471	OrIC (O,E,WGT,PRN,DK)
800938472	OrIT (O,2M,WGT,PRN,DK)
800938473	OrIC (O,2M,WGT,PRN,DK)
800938474	OrIT (O,4M,WGT,PRN,DK)
800938475	OrIC (O,4M,WGT,PRN, DK)
800938050	ORPAK ISLAND CONT,ORIC UL

4) Following is the list of OrIC8, P/N 800941505, model variations.

<i>OrIC 8/ OrIT 8 Main Configurations for FCC</i>	
P/N	Name
800941002	OrIT 8 (E)
800941003	OrIC 8 (E)
800941004	OrIT 8 (2M)
800941005	OrIC 8 (2M)
800941006	OrIT 8 (4M)
800941007	OrIC 8 (4M)
800941008	OrIT 8 (8M)
800941009	OrIC 8 (8M)
800941018	OrIT 8 (E,WGT)
800941019	OrIC 8 (E,WGT)
800941020	OrIT 8 (2M,WGT)
800941021	OrIC 8 (2M,WGT)
800941022	OrIT 8 (4M,WGT)
800941023	OrIC 8 (4M,WGT)
800941024	OrIT 8 (8M,WGT)
800941025	OrIC 8 (8M,WGT)
800941034	OrIT 8 (E,PRN)
800941035	OrIC 8 (E,PRN)
800941036	OrIT 8 (2M,PRN)
800941037	OrIC 8 (2M,PRN)
800941038	OrIT 8 (4M,PRN)
800941039	OrIC 8 (4M,PRN)
800941040	OrIT 8 (8M,PRN)
800941041	OrIC 8 (8M,PRN)

OrIC 8/ OrIT 8 Main Configurations for FCC

P/N	Name
800941050	OrIT 8 (E,WGT,PRN)
800941051	OrIC 8 (E,WGT,PRN)
800941052	OrIT 8 (2M,WGT,PRN)
800941053	OrIC 8 (2M,WGT,PRN)
800941054	OrIT 8 (4M,WGT,PRN)
800941055	OrIC 8 (4M,WGT,PRN)
800941056	OrIT 8 (8M,WGT,PRN)
800941057	OrIC 8 (8M,WGT,PRN)
800941066	OrIT 8 (E,DK)
800941067	OrIC 8 (E,DK)
800941068	OrIT 8 (2M, DK)
800941069	OrIC 8 (2M, DK)
800941070	OrIT 8 (4M, DK)
800941071	OrIC 8 (4M, DK)
800941072	OrIT 8 (8M, DK)
800941073	OrIC 8 (8M, DK)
800941082	OrIT 8 (E,WGT,DK)
800941083	OrIC 8 (E,WGT,DK)
800941084	OrIT 8 (2M, WGT,DK)
800941085	OrIC 8 (2M, WGT,DK)
800941086	OrIT 8 (4M, WGT,DK)
800941087	OrIC 8 (4M,WGT, DK)
800941088	OrIT 8 (8M, WGT,DK)
800941089	OrIC 8 (8M,WGT, DK)
800941098	OrIT 8 (E,PRN,DK)
800941099	OrIC 8 (E, PRN,DK)
800941100	OrIT 8 (2M, PRN,DK)
800941101	OrIC 8 (2M, PRN,DK)
800941102	OrIT 8 (4M, PRN,DK)
800941103	OrIC 8 (4M, PRN,DK)
800941104	OrIT 8 (8M, PRN,DK)
800941105	OrIC 8 (8M, PRN,DK)
800941114	OrIT 8 (E,WGT,PRN,DK)
800941115	OrIC 8 (E,WGT,PRN,DK)
800941116	OrIT 8 (2M,WGT,PRN,DK)
800941117	OrIC 8 (2M,WGT,PRN,DK)

OrIC 8/ OrIT 8 Main Configurations for FCC

P/N	Name
800941118	OrIT 8 (4M,WGT,PRN,DK)
800941119	OrIC 8 (4M,WGT,PRN, DK)
800941120	OrIT 8 (8M,WGT,PRN,DK)
800941121	OrIC 8 (8M,WGT,PRN, DK)
800941258	OrIT 8 (O,E)
800941259	OrIC 8 (O,E)
800941260	OrIT 8 (O,2M)
800941261	OrIC 8 (O,2M)
800941262	OrIT 8 (O,4M)
800941263	OrIC 8 (O,4M)
800941264	OrIT 8 (O,8M)
800941265	OrIC 8 (O,8M)
800941274	OrIT 8 (O,E,WGT)
800941275	OrIC 8 (O,E,WGT)
800941276	OrIT 8 (O,2M,WGT)
800941277	OrIC 8 (O,2M,WGT)
800941278	OrIT 8 (O,4M,WGT)
800941279	OrIC 8 (O,4M,WGT)
800941280	OrIT 8 (O,8M,WGT)
800941281	OrIC 8 (O,8M,WGT)
800941290	OrIT 8 (O,E,PRN)
800941291	OrIC 8 (O,E,PRN)
800941292	OrIT 8 (O,2M,PRN)
800941293	OrIC 8 (O,2M,PRN)
800941294	OrIT 8 (O,4M,PRN)
800941295	OrIC 8 (O,4M,PRN)
800941296	OrIT 8 (O,8M,PRN)
800941297	OrIC 8 (O,8M,PRN)
800941306	OrIT 8 (O,E,WGT,PRN)
800941307	OrIC 8 (O,E,WGT,PRN)
800941308	OrIT 8 (O,2M,WGT,PRN)
800941309	OrIC 8 (O,2M,WGT,PRN)
800941310	OrIT 8 (O,4M,WGT,PRN)
800941311	OrIC 8 (O,4M,WGT,PRN)
800941312	OrIT 8 (O,8M,WGT,PRN)
800941313	OrIC 8 (O,8M,WGT,PRN)

OrIC 8/ OrIT 8 Main Configurations for FCC

P/N	Name
800941322	OrIT 8 (O,E,DK)
800941323	OrIC 8 (O,E,DK)
800941324	OrIT 8 (O,2M, DK)
800941325	OrIC 8 (O,2M, DK)
800941326	OrIT 8 (O,4M, DK)
800941327	OrIC 8 (O,4M, DK)
800941328	OrIT 8 (O,8M, DK)
800941329	OrIC 8 (O,8M, DK)
800941338	OrIT 8 (O,E,WGT,DK)
800941339	OrIC 8 (O,E,WGT,DK)
800941340	OrIT 8 (O,2M, WGT,DK)
800941341	OrIC 8 (O,2M, WGT,DK)
800941342	OrIT 8 (O,4M, WGT,DK)
800941343	OrIC 8 (O,4M,WGT, DK)
800941344	OrIT 8 (O,8M, WGT,DK)
800941345	OrIC 8 (O,8M,WGT, DK)
800941354	OrIT 8 (O,E,PRN,DK)
800941355	OrIC 8 (O,E, PRN,DK)
800941356	OrIT 8 (O,2M, PRN,DK)
800941357	OrIC 8 (O,2M, PRN,DK)
800941358	OrIT 8 (O,4M, PRN,DK)
800941359	OrIC 8 (O,4M, PRN,DK)
800941360	OrIT 8 (O,8M, PRN,DK)
800941361	OrIC 8 (O,8M, PRN,DK)
800941370	OrIT 8 (O,E,WGT,PRN,DK)
800941371	OrIC 8 (O,E,WGT,PRN,DK)
800941372	OrIT 8 (O,2M,WGT,PRN,DK)
800941373	OrIC 8 (O,2M,WGT,PRN,DK)
800941374	OrIT 8 (O,4M,WGT,PRN,DK)
800941375	OrIC 8 (O,4M,WGT,PRN, DK)
800941376	OrIT 8 (O,8M,WGT,PRN,DK)
800941377	OrIC 8 (O,8M,WGT,PRN, DK)

In any case where the WGT will be added to other hosts in the future, ORPAK will expand the LMA to include the new hosts.

Since the module incorporates an integral antenna its EIRP does not change between the hosts other than changes created by the host units shape influence.

Due to all the above mentioned, ORPAK Systems Ltd feels that the testing conducted by ITL to the various hosts, with the fact that ORPAK have full control on the sales and installation of the module, assure complete compliance with FCC LMA procedure.

<p>As per § 15.212 Modular transmitters: Single modular transmitters must meet the following requirements to obtain a modular transmitter approval.</p>		
Requirement	Not Maintained	Maintained
(1) The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.	WGT's Transmitters do not have their own shielding.	
(2) The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with part 15 requirements under conditions of excessive data rates or over-modulation.	WGT's transmitters do not have buffered modulation /data inputs.	
(3) The modular transmitter must have its own power supply regulation.		WGT's modular transmitters have their own power supply regulation via 819539300 PCB ASSY. WGT CPU (VIS):

As per § 15.212 Modular transmitters:

Single modular transmitters must meet the following requirements to obtain a modular transmitter approval.

Requirement	Not Maintained	Maintained
<p>(4) The modular transmitter must comply with the antenna and transmission system requirements of §§15.203, 15.204(b) and 15.204(c). The antenna must either be permanently attached or employ a “unique” antenna coupler (at all connections between the module and the antenna, including the cable).</p> <p>The “professional installation” provision of §15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section.</p>	<p>Since the module incorporates an integral antenna its EIRP does not change between the hosts other than changes created by the host units shape influence.</p>	<p>WGT's transmitter's antennas are permanently attached. Each one of the two "PCB ASSY WGT RF-3 (AT)" has its own integrated onboard antenna.</p>
<p>(5) The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i> , the module must not be inside another device during testing for compliance with part 15 requirements. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in §15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see §15.27(a)). The length of these lines shall be the length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see §15.31(i)).</p>		<p>The unit was fully tested in a specific host which was powered from AC. AC line conducted emission (15.207) was performed on the above configuration</p>

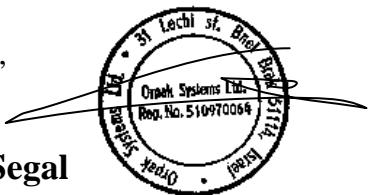
As per § 15.212 Modular transmitters:

Single modular transmitters must meet the following requirements to obtain a modular transmitter approval.

Requirement	Not Maintained	Maintained
(6) The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.		WGT's modular transmitter is equipped with a permanently affixed label

Signed,

Gidi Segal



Quality Assurance Director

Orpak Systems Ltd.