OMRON Battery-operated Blood Pressure Monitor + EKG Information for Accompanying Documents in the Scope of IEC60601-1-2:2014

Important information regarding Electromagnetic Compatibility (EMC)

This blood pressure monitor + EKG manufactured by OMRON HEALTHCARE Co., Ltd. conforms to IEC60601-1-2:2014 Electromagnetic Compatibility (EMC) standard. Nevertheless, special precautions need to be observed:

- The use of accessories and cables other than those specified or provided by OMRON could result in increased electromagnetic emission or decreased electromagnetic immunity of the monitor and result in improper operation.
- During a blood pressure measurement and/or an EKG recording, the use of the monitor adjacent to or stacked with another device, other than the smartphone to be used with the monitor, should be avoided because it could result in improper operation. In case such use is necessary, the monitor and the other device should be observed to verify that they are operating normally.
- During a blood pressure measurement and/or an EKG recording, portable RF communications device (including peripherals such as antenna cables and external antennas) other than the smartphone to be used with the monitor should be used no closer than 12 inches (30 cm) to any part of the monitor, including cables specified by OMRON. Otherwise, degradation of the performance of the monitor could result.
- Refer to further guidance below regarding the EMC environment in which the monitor should be used.

Table 1 - EMISSION Limits and Compliance

Phenomenon	EMISSION Limits	Compliance
Conducted and radiated RF EMISSIONS	CISPR 11	Group1, Class B
NOTE: EMISSION tests for Harmonic distortion, Voltage fluctuations and flicker are not applicable.		

Table 2 - IMMUNITY TEST LEVELS

Phenomenon	Basic EMC standard	IMMUNITY TEST LEVELS
Electrostatic discharge	IEC 61000-4-2	±8 kV contact ±2 kV,±4 kV,±8 kV,±15 kV air
Radiated RF electromagnetic fields	IEC 61000-4-3	10 V/m 80 MHz to 2.7 GHz 80 % AM at 1 kHz
Proximity fields from RF wireless communications equipment	IEC 61000-4-3	See table 3
Rated power frequency magnetic fields	IEC 61000-4-8	30 A/m 50 Hz or 60 Hz
NOTE: IMMUNITY tests for Electrical fast transients / bursts, Surges Line-to-line, Surges Line-to-ground, Conducted disturbances induced by RF fields, Voltage dips and Voltage interruptions are not applicable.		

Table 3 - Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications device

Test frequency (MHz)	Band (MHz)	Service	Modulation	Maximum power (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)
385	380 to 390	TETRA 400	Pulse modulation 18 Hz	1.8	0.3	27
450	430 to 470	GMRS 460, FRS 460	FM ± 5 kHz deviation 1 kHz sine	2	0.3	28
710	704 to 787	LTE Band 13, 17	Pulse modulation 217 Hz	0.2	0.3	9
745						
780						
810	800 to 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation 18 Hz	2	0.3	28
870						
930						
1720	1700 to 1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation 217 Hz	2	0.3	28
1845						
1970						
2450	2400 to 2570	Bluetooth, WLAN, 802.11 b/g/n , RFID 2450, LTE Band 7	Pulse modulation 217 Hz	2	0.3	28
5240	5100 to 5800	WLAN 802.11 a/n	Pulse modulation 217 Hz	0.2	0.3	9
5500						
5785						