



**COMMISSION REGULATION (EU) No 617/2013**  
**Product Environmental Technical Documentation Declaration**  
**(Desktop computer, and integrated desktop computer)**

DATE OF DECLARATION: 2017/3/10

7.1.1 (a)	Product Type	Desktop computer				
	Product Category	Category A				
7.1.1 (b)	Manufacturer	Micro-Star International Company Limited				
	Address	No.69, Lide St., Zhonghe Dist., New Taipei City 235, Taiwan R.O.C.				
7.1.1 (c)	Model Name	MS-A616/Pro 16 7M				
7.1.1 (d)	Year of Manufacture	2017				
7.1.1 (e)	PCs with UMA graphics E <sub>TEC</sub> value (kWh) and capability adjustments applied when UMA Graphics is On.	54.74562	N/A	N/A	N/A	
	PCs with switchable graphics E <sub>TEC</sub> value (kWh) and capability adjustments applied when switchable Graphics is On.	N/A	N/A	N/A	N/A	
7.1.1 (f)	PCs with discrete graphics E <sub>TEC</sub> value (kWh) and capability adjustments applied when all discrete graphics cards (dGfx) are enabled	N/A	N/A	N/A	N/A	
<b>Power demand</b>		<b>Category A</b>				
7.1.1 (g)	Idle state	13.57				
7.1.1 (h)	Sleep Mode	N/A				
7.1.1 (i)	Sleep Mode with WOL Enable	0.82				
7.1.1 (j)	Off Mode	0.26				
7.1.1 (k)	Off Mode with WOL Enable	N/A				
<b>Internal power supply efficiency (%)</b>						
7.1.1 (l)	<b>10% Load</b>	<b>20 % Load</b>	<b>50 % Load</b>	<b>100 % Load</b>		
	84	87	90	87		
<b>External power supply efficiency</b>						
7.1.1 (m)	<b>0 % Load (Watts)</b>	<b>25 % Load (%)</b>	<b>50 % Load (%)</b>	<b>75 % Load (%)</b>	<b>100 % Load (%)</b>	
<b>Noise levels (the declared A-weighted sound power level) of the computer (Bels / dB)</b>						
7.1.1 (n)	Idle Mode	20.9				
	Operation Mode	22				
<b>The minimum number of loading cycles</b>						
7.1.1 (o)	The minimum number of loading cycles that the batteries can withstand (applies only to notebook computers)	N/A				
<b>The measurement methodology (used to determine information mentioned in points (e) to (o))</b>						
7.1.1 (p)	7.1.1 (e) ~ (k)	EN 50564: Electrical and electronic household and office equipment - Measurement of low power consumption IEC62623: Desktop and Notebooks Measurement of Energy Consumption				
	7.1.1 (l)	Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies Revision 6.6				
	7.1.1 (m)	EN 50563:2011 - External a.c. - d.c. and a.c. - a.c. power supplies – Determination of no-load power and average efficiency of active modes				
	7.1.1 (n) & (o)	ISO-7779: Acoustics-Measurement of airborne noise emitted by information technology and telecommunications equipment				

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	<b>Sequence of steps for achieving a stable condition with respect to power demand</b>	
7.1.1 (q)	Refer to the Test Setup section of the EC 62623 Edition 1.0 2012-10 standard.	
	<b>Description of how sleep and/or off mode was selected or programmed</b>	
7.1.1 (r)	<p>The display sleep mode set to activate within 10 minutes of user inactivity.  The off mode shall be set to activate within 30 minutes of user inactivity.  The sleep and/or off mode was selected or be programmed by operating system power management function. (e.g. MS Windows , Android , Llinux...)</p>	
	<b>Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode</b>	
7.1.1 (s)	The power management function allow the system automatically switching from idle mode to display sleep mode , then system sleep mode will be active after a period of user inactivity.	
	<b>The duration of idle state condition before the computer automatically reaches sleep mode, or another condition which does not exceed the applicable power demand requirements for sleep mode</b>	
7.1.1 (t)	The system for a period no user or network activity (up to 30 minutes).	
	<b>The length of time after a period of user inactivity in which the computer automatically reaches a power mode that has a lower power demand requirement than sleep mode</b>	
7.1.1 (u)	The system for a period no user or network activity (up to 30 minutes).	
	<b>The length of time before the display sleep mode is set to activate after user inactivity</b>	
7.1.1 (v)	The system for a period no user or network activity (up to 10 minutes).	
	<b>User information on the energy-saving potential of power management functionality</b>	
7.1.1 (w)	<p>You can save money by activating power management features.  You can help reduce power usage and other side effects (e.g. Greenhouse Gas and Carbon Reduction)  The power management benefit you can also reference :  <a href="http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_low_carbon_join">http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_low_carbon_join</a></p>	
	<b>User information on how to enable the power management functionality</b>	
7.1.1 (x)	User information described in user manual of power management.	
	<b>For products with an integrated display containing mercury, the total content of mercury</b>	
7.1.1 (y)	<b>Mercury Total Content (mg)</b>	
	0	
	<b>Test parameters for measurements:</b>	
	— test voltage in V and frequency in Hz	
	— total harmonic distortion of the electricity supply system	
	— information and documentation on the instrumentation, set-up and circuits used for electrical testing	
	<b>Test voltage &amp; Frequency</b>	230 Vac / 50Hz
	<b>Total harmonic distortion (THD)</b>	<2%
7.1.1 (z)	<p>Test information including required instrumentation, setup etc. as below list is detailed in :  (For System)  EN 50564: Electrical and electronic household and office equipment - Measurement of low power consumption  IEC62623: Desktop and Notebooks Measurement of Energy Consumption  (Internal Power Supply)  Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies Revision 6.6  (External Power Supply)  EN 50563:2011 - External a.c. - d.c. and a.c. - a.c. power supplies – Determination of no-load power and average efficiency of active modes</p>	
<b>NB Only</b>	<b>A notebook computer is operated by battery/ies that cannot be accessed and replaced by a non-professional user?</b>	
7.2	<b>Is the battery/ies can be user replaceable</b>	
	N/A	
	N/A	