

**Guidelines for Series Approval of Products for Implementation of
“Electronics and Information Technology Goods (Requirements for
Compulsory Registration) Order, 2012”**

These guidelines are issued to facilitate labs / manufacturers in formation of series of products for the purpose of Compulsory Registration under the “Electronics and Information Technology Goods (Requirements for Compulsory Registration) Order, 2012”.

1. Definition of Product Family

A **product family** can be defined by the maximum configuration of components / sub-assemblies plus a description of how the models are constructed from the maximum configuration using these components and sub-assemblies.

All models which are included in the **family** typically have common design, construction, parts, or assemblies essential to ensure conformity with applicable requirements.

If a product standard defines a **product family**, in the context of the specific standard, this definition takes over.

A. Guidelines for Quantitative Selection of Samples

Number of samples selected for testing from a series shall be **one for every ten models** in the series. However, **worst case configuration from Safety Design consideration** must be selected for testing.

B. Guidelines for Technical / Qualitative Selection of Samples

1. Electronic Games (Video)

Basic Configuration	Grouping as one series provided product has
Hand held with consumable non-rechargeable battery	<ul style="list-style-type: none"> • Same Power supply layout. • Same chassis. • Same power requirement and size / type of battery.
Rechargeable battery with external charging facility	<ul style="list-style-type: none"> • Same chassis. • Same re-chargeable battery. • Same Charger. Alternate models of charger to be tested with the same electronic Game.
Mains operated with internal re-chargeable battery	<ul style="list-style-type: none"> • Same mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Same chassis. • Battery to be treated as component (Alternate sources of battery may be evaluated as part of the main product.) • Same processor / speed.
Mains operated - without battery	<ul style="list-style-type: none"> • Same mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Same processor / speed.

2. Laptop / Notebook / Tablets

Basic Configuration	Grouping as one series provided product has
Laptop	<ul style="list-style-type: none"> • Same voltage and current rating. • Same PCB layout. • Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.) • Same enclosure except for differences of decoration parts.
Notebook	
Tablet	
Devices as	

combination of above products	<ul style="list-style-type: none"> Battery to be treated as component (Alternate sources of battery may be evaluated as part of the main product.)
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3. Plasma/LCD/LED Televisions

Basic Configuration	Grouping as one series provided product has
Plasma TV	<ul style="list-style-type: none"> Same Mains layout or same SMPS board layout. Same enclosure except for differences of decoration parts. Power Transformer: Same design and insulation system.
LCD TV	
LED TV	
Devices as combination of above products	

4. Optical Disc Players With built in amplifiers

Basic Configuration	Grouping as one series provided product has
With power adaptor	<ul style="list-style-type: none"> Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.) Same enclosure except for differences of decoration parts. Same PCB layout.
Mains operated with internal power supply	<ul style="list-style-type: none"> Same Mains layout or same SMPS board layout. Same enclosure except for differences of decoration parts. Power Transformer: Same design and insulation system.

5. Microwave Ovens

Basic Configuration	Grouping as one series provided product has
Microwave Oven	<ul style="list-style-type: none"> Same Input Power rating. Same Mains layout / Power Supply. Same Enclosure except for differences of decoration

	parts. • Same Magnetron power.
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6. Visual Display Units, Video Monitors

Basic Configuration	Grouping as one series provided product has
Video Display Units	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system.
Video Monitors	

7. Printers, Plotters

Basic Configuration	Grouping as one series provided product has
Printers and Plotters	<ul style="list-style-type: none"> • Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.) • Same enclosure except for differences of decoration parts. • Same PCB layout.
	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system.

8. Scanners

Basic Configuration	Grouping as one series provided product has
With power adaptor	<ul style="list-style-type: none"> • Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.) • Same enclosure except for differences of decoration parts. • Same PCB layout.
Mains operated with internal power supply	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system.

9. Wireless Keyboards

Basic Configuration	Grouping as one series provided product has
Wireless Keyboard	<ul style="list-style-type: none"> • Same Enclosure except for differences of decoration parts. • Battery to be treated as component (Alternate sources of battery may be evaluated as part of the main product.)

10. Telephone Answering Machines

Basic Configuration	Grouping as one series provided product has
With power adaptor	<ul style="list-style-type: none"> • Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.) • Same enclosure except for differences of decoration parts. • Same PCB layout.
Mains operated with internal power supply	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system.

11. Amplifiers

Basic Configuration	Grouping as one series provided product has
With power adaptor	<ul style="list-style-type: none"> • Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.) • Same enclosure except for differences of decoration parts. • Same PCB layout.
Mains operated with internal power supply	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system.

12. Electronic Musical Systems

Basic Configuration	Grouping as one series provided product has
Mains operated with internal power supply	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system.

13. Electronic Clocks with Mains Power

Basic Configuration	Grouping as one series provided product has
With power adaptor	<ul style="list-style-type: none"> • Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.) • Same enclosure except for differences of decoration parts. • Same PCB layout. • Mounting Mechanism.
Mains operated with internal power supply	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system. • Mounting Mechanism.

14. Set Top Boxes

Basic Configuration	Grouping as one series provided product has
With power adaptor	<ul style="list-style-type: none"> • Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.) • Same enclosure except for differences of decoration parts. • Same PCB layout.
Mains operated with internal power supply	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system.

15. Automatic Data Processing Machines

Basic Configuration	Grouping as one series provided product has
With power adaptor	<ul style="list-style-type: none"> • Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.) • Same enclosure except for differences of decoration parts. • Same PCB layout.
Mains operated with internal power supply	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system.

A. Guidelines for series approval of products for implementation of “Electronics and Information Technology Goods (Requirements for Compulsory Registration) Order, 2012” – Phase II.

1) Item No. 16: Power Adaptors for IT Equipment

Product	Upto a range of output power rating will be accommodated in the series, provided
Power Adaptors for IT Equipment	<ul style="list-style-type: none"> • Same rated input voltage • Same class of construction • Same mains PCB design layout and transformer

2) Item No. 17: Power Adaptors for Audio, Video & Similar Electronic Apparatus

Product	Upto a range of output power rating will be accommodated in the series, provided
Power Adaptors for Audio, Video & Similar Electronic Apparatus	<ul style="list-style-type: none"> • Same rated input voltage • Same class of construction • Same mains PCB design layout and transformer

3) Item No. 18: UPS / Invertors of rating ≤ 5 KVA

Product	Upto a range of output power rating will be accommodated in the series, provided
UPS / Invertors of rating ≤ 5 KVA	<ul style="list-style-type: none"> • Same rated input voltage • Same rated output voltage • Same frequency and number of phases at input / output • Same cabinet design and class of construction • Same power transformer rating and design • Same PCB design and layout • Same battery bus voltage

4) Item No. 19: DC or AC Supplied Electronic Control Gear for LED Modules

Product	Upto a range of output power/current rating will be accommodated in the series, provided
DC or AC Supplied Electronic Control Gear for LED Modules	<ul style="list-style-type: none"> • Same rated input voltage • Same class of construction • Three samples covering highest, interim and lowest ratings of the range are tested

	<ul style="list-style-type: none"> • Different enclosure designs (upto 03) are preferably covered in testing when included in the same series
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5) Item No. 20: Sealed Secondary Cells / Batteries containing Alkaline or other non-acidic Electrolyte for use in portable applications

Product	Upto a range of capacity rating will be accommodated in the series, provided
Battery	<ul style="list-style-type: none"> • Same nominal voltage • Cells of same construction design • Same electrodes/electrolytes
Cells	<ul style="list-style-type: none"> • Same nominal voltage • Same construction design • Same electrodes/electrolytes

6) Item No. 21: Self - Ballasted LED Lamps for General Lighting Services

Product	Upto a range of power will be accommodated in the series, provided
Self - Ballasted LED Lamps for General Lighting Services	<ul style="list-style-type: none"> • Same rated input voltage • Same rating of ballast (LED Gear)/Driver Circuit • Same mains PCB design and layout • Same cap design

7) Item No. 22: Fixed General Purpose LED Luminaires

Product	Upto a range of rated power will be allowed in the series, provided
Fixed General Purpose LED Luminaires (excluding Fancy Lights)	<ul style="list-style-type: none"> • Same DC or AC Supplied Electronic Control Gear for LED Modules (if inbuilt in luminaire) • Same material characteristics for enclosure • Same class of construction

Product	Upto a range of rated power will be allowed in the series, provided
Fixed General Purpose LED Luminaires (Fancy lights)	<p>For the electrical part upto driver of the Fancy Light/ Chandelier:</p> <ul style="list-style-type: none"> • Safety Critical components are same. • Pre-registered encapsulated drivers are used (as mentioned in CDF). • Same class of construction

	<ul style="list-style-type: none"> • Three samples covering highest, interim and lowest electrical ratings of the range are tested. • In addition, in the same series, wherever applicable, samples of three different weights (highest, interim and lowest values) are checked only for the requirements relating to suspension/fixing etc. as per the relevant standard IS 10322 (Part 5/Sec 1). <p>Note:</p> <ol style="list-style-type: none"> 1) For considering a model of Fancy light/Chandelier, the safety design of housing containing and including electrical part upto driver only shall be considered. 2) Since model nos. are generally not assigned in this Industry Segment, and fancy parts keep on changing frequently, a pictorial view of each electrical fitting atleast upto the driver part (not decorative/fancy part) covered in the series shall be placed in the test report. This would not require submission of actual samples to the Labs but could be submitted through documentary evidence.
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8) Item No. 23: Mobile Phones

Product	Grouping as one series, provided
Mobile Phones	<ul style="list-style-type: none"> • Same battery capacity • Same battery charging voltage and current • Same battery side PCB design and layout • Same adaptor • Similar enclosure

9) Item No. 24: Cash Registers

Product	Grouping as one series, provided
Cash Registers	<ul style="list-style-type: none"> • Same rated input voltage • Same rated current/wattage • Same class of construction • Same mains layout or same SMPS board layout • Power Transformer: Same design and insulation system • Same enclosure except for differences of decoration parts • Same type of battery and capacity (if applicable)

10) Item No. 25: Point of Sale Terminals

Product	Grouping as one series, provided
Point of Sale Terminals	<ul style="list-style-type: none"> • Same rated input voltage • Same rated current/wattage • Same class of construction • Same degree of ingress protection • Same mains PCB design and layout • Same type of battery and capacity (if applicable)

11) Item No. 26: Copying Machines / Duplicators

Product	Grouping as one series, provided
Copying Machines / Duplicators	<ul style="list-style-type: none"> • Same rated input voltage • Same rated current/wattage • Same system of copying / duplication • Same largest paper size • Same mains layout or same SMPS board layout • Power Transformer: Same design and insulation system • Same enclosure except for differences of decoration parts

12) Item No. 27: Smart Card Readers

Product	Grouping as one series, provided
Smart Card Readers	<ul style="list-style-type: none"> • Same rated input voltage • Same rated current/wattage • Same type (Contact/Contactless) • Same mains layout or same SMPS board layout • Power Transformer: Same design and insulation system • Same enclosure except for differences of decoration parts • Same type of battery and capacity (if applicable)

13) Item No. 28: Mail Processing / Postage Machines / Franking Machines

Product	Grouping as one series, provided
Mail Processing / Postage Machines / Franking Machines	<ul style="list-style-type: none"> • Same rated input voltage • Same rated current/wattage • Same mains layout or same SMPS board layout • Power Transformer: Same design and insulation system • Same enclosure except for differences of decoration parts

14) Item No. 29: Passport Readers

Product	Grouping as one series, provided
Passport Readers	<ul style="list-style-type: none"> • Same rated input voltage • Same rated current/wattage • Same mains layout or same SMPS board layout • Power Transformer: Same design and insulation system • Same enclosure except for differences of decoration parts

15) Item No. 30: Power Banks for use in portable applications

Product	Upto a range of capacity rating will be accommodated in the series, provided
With External Adaptor	<ul style="list-style-type: none"> • Same rated input voltage • Same class of construction • Same degree of ingress protection • Same PCB design and layout • Same battery/cell type • Same material characteristics for enclosure
With in-built Adaptor	<ul style="list-style-type: none"> • Same rated input voltage • Same degree of ingress protection • Same mains PCB design and layout • Same battery/cell type • Same charging circuit • Same material characteristics for enclosure

B. Guidelines for Quantitative Selection of Samples

- A series may consist of 10 models except for Item No. 20 (Sealed Secondary Cells/Batteries) and Item No. 22 (Fixed General Purpose LED Luminaires).
- For Item No. 20, a series may consist of upto 20 models.
- For Item No. 22, in case of Fancy lights/Chandeliers, a series may consist of upto 50 models.
- Unless specified otherwise, one sample may be tested for each series.
- In any of the above consideration, worst case configuration from Safety Design perspective must be selected for testing.

Guidelines for Series Approval of Products for Implementation of “Electronics and Information Technology Goods (Requirements for Compulsory Registration) Order, 2012” – Phase III

1. Item No. 32 : Recessed LED Luminaries

Product	Upto a range of rated power will be allowed in the series, provided
Recessed LED Luminaries	<ul style="list-style-type: none"> • Same class of construction of luminaire. • Registered electronic control gear having R.number (information to be provided) • Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing) • Same material for enclosure

2. Item No. 33: LED Luminaries for road and street Lighting

Product	Upto a range of rated power will be allowed in the series, provided
LED Luminaries for road and street lighting	<ul style="list-style-type: none"> • Same class of construction of luminaire • Registered electronic control gear having R.number (information to be provided) • Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing) • Same material for enclosure • Same ambient temperature rating • Same IP category

3. Item No. 34: LED Flood Lights

Product	Upto a range of rated power will be allowed in the series, provided
LED Flood Lights	<ul style="list-style-type: none"> • Same class of construction of luminaire • Registered electronic control gear having R.number (information to be provided) • Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing) • Same material for enclosure

	<ul style="list-style-type: none"> • Same ambient temperature rating • Same IP category
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4. Item No. 35: LED Hand Lamps

Product	Upto a range of rated power will be allowed in the series, provided
LED Hand Lamps	<ul style="list-style-type: none"> • Same class of construction of luminaire • Registered electronic control gear having R.number (information to be provided) • Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing) • Same material for enclosure

5. Item No. 36: LED Lighting Chains

Product	Upto a range of rated power will be allowed in the series, provided
LED Lighting Chains	<ul style="list-style-type: none"> • Same class of construction of luminaire • Registered electronic control gear having R.number (information to be provided) • Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing) • Same material for enclosure • Same IP category

6. Item No. 37: LED Luminaries for Emergency Lighting

Product	Upto a range of output power rating will be accommodated in the series, provided
LED Luminaries for Emergency Lighting	<ul style="list-style-type: none"> • Same class of construction of luminaire • Registered electronic control gear having R.number (information to be provided) • Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing) • Same material for enclosure • Same type of battery • Same battery nominal voltage & Capacity

	<ul style="list-style-type: none"> • Same output voltage & current rating of adapter complying to IS 302.
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7. Item No. 38: UPS/Inverters of rating \leq 10KVA

Basic Configuration	Grouping as one series provided product has
UPS/Inverters of rating \leq 10KVA	<ul style="list-style-type: none"> • Same rated input voltage • Same rated output voltage • Same frequency and number of phases at input/output • Same cabinet design and class of construction • Same power transformer rating and design • Same PCB design and layout • Same battery bus voltage

8. Item No. 39: Plasma/LCD/LED/Television Screen size up-to 32"

Basic Configuration	Grouping as one series provided product has
Plasma/LCD/LED/Television Screen size up-to 32" With in-built adapter	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system
With external adapter	<ul style="list-style-type: none"> • Registered adaptor of same rated input voltage and output current. • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system

9. Item No. 40: Visual Display Units, Video Monitors of Screen Size up-to 32"

Product	Grouping as one series provided product has
Visual Display Units, Video Monitors of Screen Size up-to 32"	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure except for differences of decoration parts. • Power Transformer: Same design and insulation system

10. Item No. 41: CCTV Cameras / CCTV Recorders

Product	Upto a range of max wattage & maximum IR will be included in series provided
CCTV Camera	<ul style="list-style-type: none"> • Same voltage • Same IP rating • Same PCB layout • Similar enclosure material except for differences of decoration parts. • Same enclosure shape
CCTV Recorder with internal power supply	<ul style="list-style-type: none"> • Same Mains layout or same SMPS board layout. • Same enclosure material except for differences of decoration parts • Power Transformer: Same design and insulation system

CCTV recorder with external adapter	<ul style="list-style-type: none"> • Same input voltage & current rating of power source/registered adapter • Same PCB layout • Same enclosure material except for differences of decoration parts.
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11.Item No. 42: Adaptors for Household and similar electrical appliances

Product	Grouping as one series provided product has
Adaptors for Household and similar electrical appliances	<ul style="list-style-type: none">• Same class of construction• Same rated input voltage• Same Main PCB design Layout and transformer

12.Item No. 43: USB Driven Barcode Reader, Barcode Scanner, Iris scanners, Optical fingerprints scanners

Product	Grouping as one series provided product has
USB Driven Barcode Reader, Barcode Scanner, Iris scanners, Optical fingerprints scanners	<ul style="list-style-type: none">• Same input voltage and current• Same battery nominal voltage and capacity• Same enclosure except for differences of decorative parts

13.Item No. 44: Smart Watches

Product	Grouping as one series provided product has
Smart Watches (with or without display)	<ul style="list-style-type: none">• Same input voltage and current• Same enclosure except for differences of decorative parts• Same battery nominal voltage and capacity• Same rated input voltage, class of construction of adapter• Adapter to be BIS registered with same rated input voltage with/without display in separate series.
	<ul style="list-style-type: none">• Smart watches with SIM are covered under the mobile phones category. <i>However, smart watch, with SIM facility, which do not have text input capability would fall under category of smart watch.</i>

➤ **Guidelines for Quantitative Selection of Samples**

- Number of samples selected for testing from a series shall be **one for every ten models** in the series. However, **worst case configuration from Safety Design consideration** must be selected for testing.
- For Item No. 32-37, a series may consist of upto 20 models.