

## UMS Charge Code Form Appendix: Signals and Miscellaneous

**This Guidance is intended for use with the UMS Charge Code Form for Signals and Miscellaneous equipment.**

### Questions 1-2

The test house must have ISO 17025 accreditation, but can be located anywhere in the world. A PDF of their accreditation certificate *and the schedule to their certificate*, or a link to their certification/schedule on their website would be sufficient evidence of their fitness to perform testing for UMS purposes. *The ISO accreditation of the test house must include the ability to carry out testing on the electrical properties of equipment. It is important that you verify with the test house that their accreditation includes this capability, and discuss any uncertainties with ELEXON in advance of committing to testing, as otherwise we may be unable to process your application.*

### Question 3

To be issued with a Charge Code, the Circuit Watts and Volt Ampere (VA) of the product should be measured at five different voltage levels, from 210V, increasing in 10V increments up to 250V (at 50Hz). A sample size of five is required **unless, on review of the test data, it is determined that more samples are needed**. Here is an example of the format:

#### Manufacturer's name and equipment model name

Voltage		Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
<b>210</b>	Watts					
	VA					
<b>220</b>	Watts					
	VA					
<b>230</b>	Watts					
	VA					
<b>240</b>	Watts					
	VA					
<b>250</b>	Watts					
	VA					

The power measurements must include any voltage transformers necessary to operate the equipment from the mains and samples must be tested after operating for sufficient time to reach their steady load state. The accuracy of the measurements shall be stated and the minimum accuracy shall be  $\pm 2\%$  of the recorded value.

**Some equipment has functionality which requires a larger number of test samples to be submitted:**

Equipment type	Functionality	Additional Testing Requirements
Traffic Lights	N/A	We require 5 samples of test data for each aspect (red, amber and green).
LED Traffic Lights which work with a Halogen Lamp Monitoring System	A dummy load may be used to step up the power so that the halogen Lamp Monitoring System would be able to detect a failure.	If a dummy load is used, please include its power consumption in the test samples.
Variable elements	Equipment that has variable load due to varying customer requirements or heating and cooling elements.	Each of the variable elements should be measured and details of when they will be used provided. Please discuss these variable elements with ELEXON prior to testing as it is possible they may make the equipment unsuitable for an Unmetered Supply and hence a Charge Code to be issued.

## Question 4

A product specification, brochure or photo assists us in understanding your product, provides additional information to the expert group who approve Charge Codes and therefore improves the chances of your product being given a Code in a timely fashion.

## Question 5

Please see [pages 10-11 \(Signals\)](#) or [pages 13-15 \(Miscellaneous\)](#) of the [Operational Information Document](#) for a complete list of possible equipment, with codes.

If your product has multiple intended uses, or modes of operation, please list all of the relevant codes against Question 5, so that ELEXON can provide you with Charge Codes to cover off all of the equipment's likely applications. For example, an LED Belisha Beacon might be capable of operating as either a dimmable or un-dimmable product, and would therefore need to be given two Charge Codes, i.e. one for situations where it is being used with dimming, and one for situations where it is being used without.

## Question 6

**If you are applying for a Charge Code for miscellaneous equipment you do not need to supply a nominal wattage. The nominal wattage for such equipment will always equal its average circuit wattage, as derived from your test data.**

The nominal wattage of your equipment is the wattage 'on the box', or the wattage you declare to customers. We use this wattage in constructing a Charge Code. It is therefore important that it matches the wattage you sell your products at, because it is the best way for end-users to quickly and easily find your product on the Charge Code spreadsheet.

If you are applying for dimmed Charge Codes, we only require a nominal wattage for the product at full power.

## Question 7

This question is intended to flag equipment that operates in an unusual way, so that we can take account of its characteristics when producing a Charge Code. The way that we calculate circuit wattages for Charge Codes is based on certain assumptions about how equipment operates. If your **equipment doesn't conform to these assumptions, and we aren't aware of the fact, there is a risk that** their circuit wattages will not be calculated accurately. For example, if your pedestrian push/wait button has an alternating red/green man that only illuminates when the wait button is pressed, and **we aren't aware of this, we can't apply a downward adjustment to the circuit wattages for the equipment to allow for times when the button hasn't been pressed. Similarly, miscellaneous** equipment might have any number of unusual characteristics, which we need to be aware of to provide a Charge Code that accurately reflects its mode of operation.

If the product has fixed times at which it turns on, turns off, or dims, these can also be listed under this question.

## Question 8

The name or model number you give for the product should be what appears 'on the box', as sold to customers. The entry for your product on the Charge Code spreadsheet will include a cell with this description, and customers and UMSOs will use it to select the correct product for their inventories. It is therefore important that this description is clear, and matches the name under which your product is sold.

If you are applying for dimmed Charge Codes, please note that your codes will be given dimmed percentage values based on the circuit wattages in your test data. We do not use dimmed values based on Lumen levels in any of the descriptions on the Charge Code spreadsheet.

## Question 9

If you are not the manufacturer of the equipment you are applying for, please specify the manufacturer in the field provided.

Generally, the manufacturer of the equipment is the party who must apply for a Charge Code. The only instance in which an exception can be made to this rule is where the manufacturer will be using you as their sole distributor, and is willing to provide written assurance of the fact to ELEXON.

If you are unsure about how to answer this question, please contact us at [UMS.Operations@elexon.co.uk](mailto:UMS.Operations@elexon.co.uk).

### Need more information?

For more information please contact the **BSC Service Desk** at [bscservicedesk@cgi.com](mailto:bscservicedesk@cgi.com) or call **0870 010 6950**.

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