

Introduction to IEC62368-1

Due to the ever blurring line between traditional Audio-Video devices and IT equipment, the IEC (International Electro technical Commission) has moved away from the existing separate standards for these product groups (IEC60950 for IT, IEC60065 for AV) and towards a single new, harmonised safety standard to govern both.

This new standard, IEC62368-1, is fundamentally different from both preceding standards. Where the legacy standards were known as prescriptive standards, in which a set of rules written down in the standard were to be followed exactly as written, IEC62368-1 is written as a so called Hazard based standard, in which the focus is based more on identifying potential safety hazards and designing the product to eliminate them. IEC62368-1 is intended to offer manufacturers more performance options to demonstrate compliance.

While IEC62368-1 does indeed offer more design options on certain safety critical aspects of a product, it is important to note that the standard is also more stringent on other aspects, possibly requiring updates to existing products to guarantee compliance.

Current status and mandatory date

As of May 2019, IEC62368-1 has been converted to national equivalents and accepted by most of the key global markets, for example:

٠	Europe:	EN62368-1
٠	US/Canada:	CSA/UL 62368-1
٠	Japan:	JIS C 62368-1
٠	Australia/New Zealand:	AS/NZS 62368-1

In both the EU and the North American market (US/CA), their respective versions of the new standard will become mandatory from **December 20th**, **2020**.

In the EU, no products may be sold after this date which do not comply with the new EN62368-1 standard.

In the NA markets, legacy products will still be allowed for sale, but all new products will be subject to CSA / UL62368-1.

The China situation

As of May 2019, CQC is drafting a new standard based on IEC62368-1, but the new standard has not been accepted. There is currently no information about the expected time to adoption of IEC62368-1 by CQC.



Impact on Hypex modules

Existing Hypex mains powered modules were designed to comply with, and have been CB tested according to, IEC60065. Due to changes in the standard, product updates are required on all CB tested legacy mains powered modules to ensure compliance with IEC62368-1.

The following products are affected:

SMPS series	NC_MP series	
SMPS400Axxx ¹	NC122MP	
SMPS600N400 ¹	NC250MP	
SMPS1200Axxx ¹	NC252MP	
SMPS3KAxxx ¹	NC500MP	
	NC502MP	

Hypex is working on updating the aforementioned modules. Once the module updates have been completed, these modules will be re-submitted for CB testing at our new approbation partner, Intertek SEMKO.

New Hypex safety documentation

To complement the aforementioned required CB testing according to IEC62368-1, Hypex has taken the opportunity to expand the regulatory safety testing on its modules.

СВ

Until the Chinese CQC has accepted IEC62368-1, all Hypex modules will be CB tested according to both IEC62368-1 and IEC60065. National deviations will be included for CENELEC, USA/CA, New Zealand, Australia, Japan and China.

ETL

In addition to CB testing, all aforementioned modules will be submitted for an ETL listing. The ETL mark allows faster entry into the North American market for our customer's end product. For more information about the ETL mark, visit <u>http://www.intertek.com/marks/etl/</u>.

Datasheet

New module datasheets will list the exact version of the relevant standards used during approbation, as well as the IECEE reference number for the CB report.

The ETL listing status of a product can be verified through Intertek's ETL Listed Mark Directory: http://www.intertek.com/directories/etl-listed-mark/

¹ xxx refers to specific model number, for example SMPS400A100, SMPS400A180 and SMPS400A400

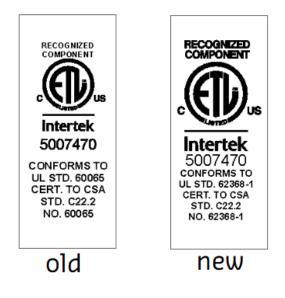


Impact on Hypex Customers

The new modules can be recognized by the used ETL label and based on revision. See below overview for these revision changes:

SMPS modules			NC_MP modules		
Model	Legacy rev.	New rev.	Model	Legacy rev.	New rev.
SMPS400Axxx	R14xx	R15xx	NC122MP	R03xx	R04xx
SMPS600N400	R05xx	R06xx	NC250MP	R03xx	R04xx
SMPS1200Axxx	R09xx	R10xx	NC252MP	R03xx	R04xx
SMPS3KAxxx	R09xx	R10xx	NC500MP	R03xx	R04xx
			NC502MP	R03xx	R04xx

Not all products (old revision) are currently ETL certified and therefor do not have any ETL label. See below the old and new ETL labels used on all related products were you can clearly recognize the safety standard numbers 60065 (old) and 62368-1 (new):



Availability of the updated modules, both in sampling- and mass production status, will be communicated on a case-by-case basis.

Due to the updates and possible changes on safety critical positions on these modules, updates to the safety approbation of end-products containing these modules may be required. We advise customers to contact their approbation partner once the relevant updated module is available. Hypex can provide the full CB report, as well as the ETL CDR report, to the safety partner of our end customers upon request.

To allow for a smooth transition, Hypex will continue to provide the legacy modules for some time after release of the updated modules. However, to comply with the impending mandatory date of December 20th, 2020, the legacy modules will be phased out. During the transition period, customers may order both legacy and updated modules (once available). If you need to order any particular revision (old or new) we ask you to order by email. On the web shop we will switch to the new revision as soon as possible.



Important dates

- May 20th, 2019
 - EOL notification of legacy modules (through this document)
- Aug 20th, 2020
 - Last time buy of legacy modules
 - Customers can place their final orders of the legacy modules up to May 20th. After this date, no orders for the legacy modules will be accepted
 - Shipment of legacy modules may be spread out up to November 20th.
- November 20th, 2020
 - Last shipment of legacy modules
 - Following November 20th, no legacy modules will be shipped from Hypex. All following shipments must be made using the updated modules.
- December 20th, 2020
 - Mandatory date for IEC62368-1 in the EU, US and Canada.

Further questions

For technical support questions regarding the transition to IEC62368-1, please contact: IEC62368-1@hypex.nl

For sales related questions regarding the transition to IEC62368-1, please contact: sales@hypex.nl