

# Product Upgrade Notice: UHP-1000/1500/2500 & PHP-3500 Upgraded with Over Temperature Automatic De-rating Function

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The conduction-cooled UHP family is MEAN WELL new generation of industrial control power supply, and its unique fanless design has been well received by the market since release. UHP family 1000W and above products (UHP-1000/1500/2500 & PHP-3500) come with the Programmable Current (PC) function, which allows the output current to be modulated between 20%~100% by applying an external 1~5VDC control signal. One common application for the PC function is charging application. Customers can use the PC function to control charge rate of batteries. During the charging operation, if the temperature is too high, traditional over temperature protection will shut-off the output power completely until temperature cools down. The upgraded UHP-1000/1500/2500 & PHP-3500 will have automatic output power de-rating when operated with the PC function, which will effectively improve product reliability and still charge the batteries at a slower rate to maintain equipment operation.

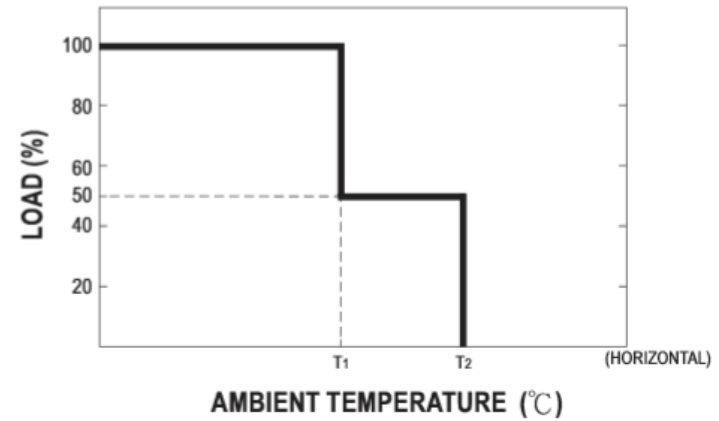
Figure 1 shows the new de-rating curve added to the UHP-1000 specification sheet. When the power supply is operating under PC mode and full load conditions, the output current will de-rate to 50% when the operating temperature exceeds the maximum ambient temperature. If the temperature continues to rise, then the output will shut-off until the power supply is cool enough to be re-powered on. Figure 2 is the new de-rating curve of UHP-1500/2500 & PHP-3500, which is slightly different from the UHP-1000 automatic de-rating curve. Firstly, the automatic de-rating will activate when either PC function or communication protocol is utilized. Secondly, there will be de-rating of 10%/°C when temperature rises from T1 to T2.

(Figure 1)

※ Covered by over temperature protection, auto de-rating function works under operation in PC mode .

T<sub>1</sub>(Typ.): Maximum ambient temperature of full load.

T<sub>2</sub>(Typ.): T<sub>1</sub>+5°C.

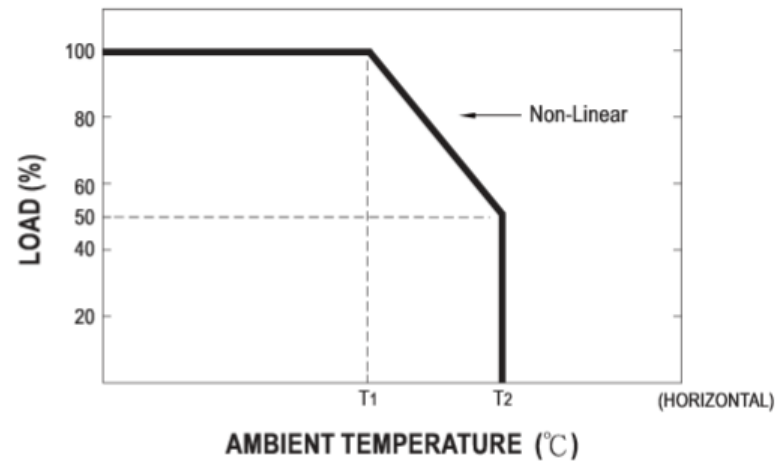
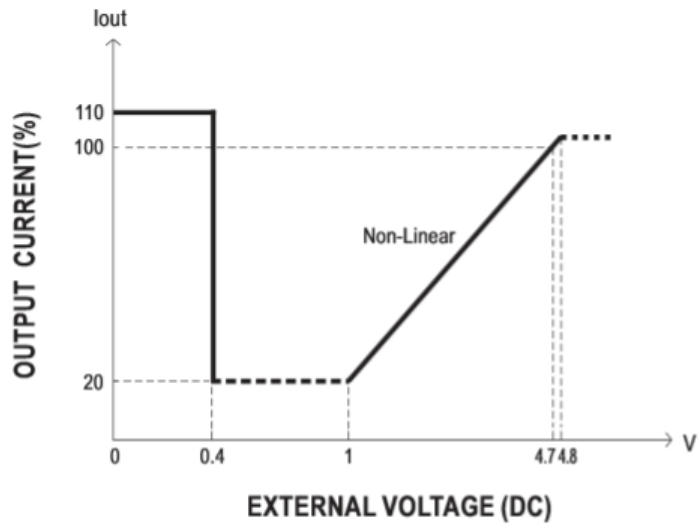


(Figure 2)

※ Covered by over temperature protection, auto de-rating function works under operation either in PC mode or under control by communication protocol.

T<sub>1</sub>(Typ.): Maximum ambient temperature of full load.

T<sub>2</sub>(Typ.): T<sub>1</sub>+5°C.



The upgrade has been implemented to new productions of UHP-1000/1500/2500 starting November 6<sup>th</sup>, 2019 (Production Lot: W1912A). PHP-3500' s standard products already have this function built-in. All relevant cost incurred by the product upgrade will be absorbed by MEAN WELL, and the product price will not be adjusted. If you have any questions about the product upgrade, please reference the newest product specification sheet posted on the MEAN WELL public website or check with your MEAN WELL sales representative.

(Table 1)

<b>Model</b>	<b>Upgraded Date</b>	<b>Lot No.</b>
UHP-1000	2019/11/6	W1912A
UHP-1500	2019/11/6	W1912A
UHP-2500	2019/11/6	W1912A

**MEAN WELL ENTERPRISES CO., LTD**

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