

BREATHING LIFE INTO MACHINES

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## Application Note

## **Battery Backed RAM**

A battery is included within the MC Euro205, MC204, MC206 and MC216 to maintain the RAM memory contents when the Motion Coordinator is not powered. This document gives details of battery performance under typical standby<sup>(1)</sup> operating conditions. Overall battery life is quoted by the manufacturer as 6 years<sup>(2)</sup> at 20°C and 3 years<sup>(2)</sup> at 45°C.

## RAM Battery performance table.<sup>(2)</sup>

	Euro205		MC204		MC206		MC216	
	Typical	Min	Typical	Min	Typical	Min	Typical	Min
Battery type	NiMH		NiMH		NiMH		NiMH	
Capacity	15 mAh		150 mAh		15 mAh		150 mAh	
Voltage	3.6V		3.6V		2.4V		3.6V	
Standby time (months) <sup>(3)</sup>	6	2	6	2	4	1.5	2	1.25
Re-charge time with system power on (4)	220 hrs	65 hrs	280 hrs	160 hrs	200 hrs	130 hrs	280 hrs	160 hrs
Programs maintained by battery (5)	YES		YES		YES		YES	
User Variables maintained	YES		YES		YES		YES	
Table memory maintained	YES		YES		YES		YES	

Notes:

(1) "Standby" use means that the battery is being constantly trickle charged.

- (2) We have made every effort to ensure that the information contained in this application note is correct. However, data is subject to change without notice and Trio cannot be held responsible for any omissions or errors that occur. This application note neither replaces nor extends Trio Motion Technology's standard warranty terms and conditions.
- (3) Discharge times for new battery at 20°C, minimum discharge time at operating temperature of 45°C. A battery at the end of it's life will discharge in a much shorter time.
- (4) Figure assumes the battery is completely discharged and gives the time required to achieve full charge. Note that if the battery is in deep discharge, it will take up to 3 charge/discharge cycles to bring it back to full capacity.
- (5) For greater security, the programs can be stored in FLASH EPROM.