

# IM04: Compact 1000 Item RAM

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## Features

- Has 1000 different codes/item types. a dropper of storage per code.
- Random access. Can insert and retrieve items in constant time in any order.
- Compact. Each address is packed into a 1x1 area.
- 46gt latency from call request to item.
- Fully hopperlocked.

## Applications

- Temp storage for merging.
- Dynamic bulk mapping storage.

## General Description

The IM04 is able to store and retrieve items with a specific decimal code. This may be useful as a temp storage in an encoded dynamic sorting system.

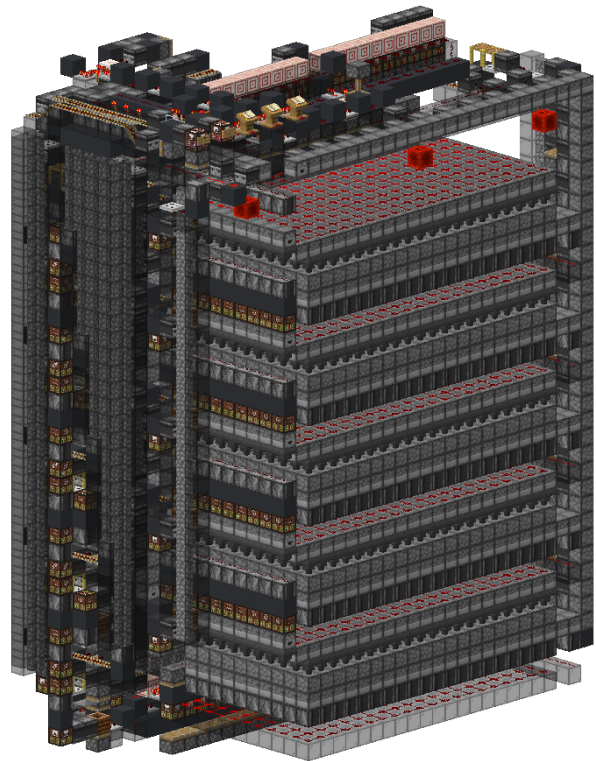


Figure 1: Compact 1000 Item RAM

## Device Specifications

Table 1: Inputs

Name	Range	Description
Code Digit 1	1-10	First digit indicating level and side.
Code Digit 2	1-10	Second digit indicating row.
Code Digit 3	1-10	Third digit indicating column.
Execute insertion	Pulse	Executes insertion with the given settings.
Execute retrieval	Pulse	Executes retrieval with the given settings.
Item Input	Item	Item to be inserted/retrieved.

Table 2: Outputs

Name	Range	Description
Item Output	Item	Output for retrieval orders.

Table 3: Device Specifications

Parameter	Min.	Typ.	Max.	Unit	Conditions
Order Execution Interval	32	-	-	gt	Normal Usage
Hopper Count		1055		Hoppers	
MC Version	1.13	1.19.3	-	MCV	Latest version at time of writing: 1.21.4
Dimensions		17 x 41 x 33		Blocks	

## Testing Data

Table 4: Executed Tests

Test	Result
Insertion	Items were successfully inserted in all positions.
Retrieval	Items were successfully retrieved from all positions.

## Download Information

Table 5: Download Information

Identifier	MC	File	Description
IM04	1.19.3	<a href="#">IM04_Compact_1000_Item_RAM.litematic</a>	Schematic of device.