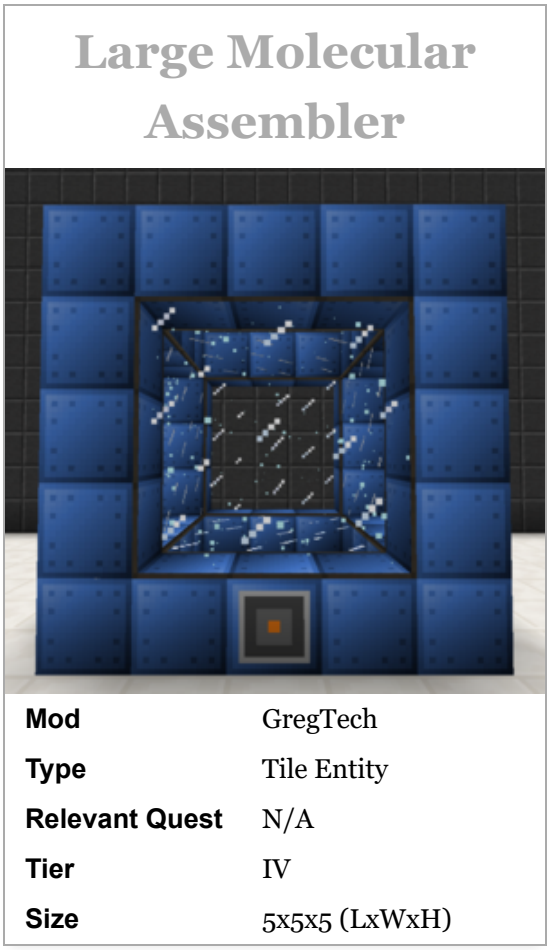
GT New Horizons

Large Molecular Assembler



Mod	GregTech
Type	Tile Entity
Relevant Quest	N/A
Tier	IV
Size	5x5x5 (LxWxH)

The **Large Molecular Assembler** (LMA) is an IV tier multiblock for mass auto-crafting in an AE2 network. The LMA is a direct upgrade of the molecular assembler with up to 256 parallels per 0.25s for a maximum production speed of 1,024 crafts per second. That is 102.4x faster than a regular molecular assembler with five acceleration cards. Furthermore, patterns are supplied to the LMA through input bus(es) which means there is effectively no cap to the amount of patterns that it can hold; three super buses is more than enough for even the Stargate.

Construction

The LMA consists of vibrant quartz glass on each of its sides. No other type of glass is accepted. The interior of the structure is entirely mandatory air for the machine to display the currently active recipe similar to its singleblock predecessor. Disable the render by right-clicking the controller with a screwdriver and setting Crafting FX to Hidden. Multi-amp and laser energy hatches are NOT supported, but there can be any number of regular energy hatches to overclock the machine. The Multiblock Structure Hologram Projector can show/build the structure for the player.

Connect the LMA to an AE2 network by running a cable (any color) to the face of the controller which uses one channel and has a passive drain of 5 EU/t on the network. The cable only attaches when the LMA is active and running. Place any crafting patterns in an input bus, or super bus.

Requires:

- 1 Large Molecular Assembler (controller)
- 54 Vibrant Quartz Glass
- 43 Robust Tungstensteel Machine Casing
- 1 Maintenance Hatch
- 1+ Energy Hatch
- 1+ Input Bus

Wallsharing

LMAs can wallshare each side of the structure to save on casings, glass, buses, and hatches. Sharing input/super buses filled with patterns is perfectly acceptable and therefore highly recommended. The LMA only ever consumes 0.5A of power meaning a single energy hatch can power up to 4 LMA at once, although only 1-2 are really necessary.

Usage

The recipe length and number of parallels are dictated by the energy hatch(es) on the LMA. The first two overclocks above MV cut the recipe length in half and every subsequent overclock doubles the number of parallels. The LMA only consumes 16 EU/t while idle, but jumps up to 0.5A of the current voltage while running. The following table summarizes the properties for each energy hatch. Also provided is a table summarizing the speed of the singleblock molecular assembler, for comparison.

Large Molecular Assembler

Energy Hatch	Length	Parallels	Idle Consumption	Active Consumption
LV	1.00 s	2	16 EU/t	64 EU/t
MV	1.00 s	2	16 EU/t	64 EU/t
HV	0.50 s	2	16 EU/t	256 EU/t
EV	0.25 s	2	16 EU/t	1,024 EU/t
IV	0.25 s	4	16 EU/t	4,096 EU/t
LuV	0.25 s	8	16 EU/t	16,384 EU/t
ZPM	0.25 s	16	16 EU/t	65,536 EU/t
UV	0.25 s	32	16 EU/t	262,144 EU/t
UHV	0.25 s	64	16 EU/t	1,048,576 EU/t
UEV	0.25 s	128	16 EU/t	4,194,304 EU/t
UIV	0.25 s	256	16 EU/t	16,777,216 EU/t
UMV	0.25 s	256	16 EU/t	67,108,864 EU/t
UXV	0.25 s	256	16 EU/t	268,435,456 EU/t

Molecular Assembler

Acceleration Cards	Length	Parallels
0	0.50 s	1
1	0.40 s	1
2	0.30 s	1
3	0.25 s	1
4	0.20 s	1
5	0.10 s	1