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| **DESCRIPTION** | | | |
| **THE ETHERAL HALO (HYBRID MACHINE 5 AXIS)** | |  | |
| **SPECIFICATION** | |  | |
| **GENERAL** | | | |
| Type of Machine | | Hybrid Manufacturing | |
| Machine Size | | 1300 x 1300 x 1290 mm | |
| Structure of Machine | | Aluminum and Mild Steel | |
| Power source required | | Single Phase | |
| Power Consumption | | 2.5 kW | |
| **KINEMATICS** | | | |
| Axis Travel | | 3 Axis | 5 Axis |
| X axis | | 200 mm | 150 mm diameter |
| Y axis | | 200 mm |
| Z axis | | 200 mm | 150 mm |
| A axis | | - 30 degrees to +110 degrees | |
| C axis | | Continuous rotation (-9999 - +9999 degrees) | |
| Axis motion transmission | X axis | Ball screw | |
| Y axis | Ball screw | |
| Z axis | Ball screw | |
| A axis | Worm Gear Box drive | |
| C axis | Worm Gear Box drive | |
| Axis drivers | | Stepper Servo Motor with Micro Stepping | |
| Maximum traverse rate | | 2000 mm/min | |
| Axis sliders | | Linear motion guide | |
| **ADDITIVE MANUFACTURING – 3 AXIS** | | | |
| Build Volume | | 200 x 200 x 200 mm | |
| Nozzle Diameter | | 0.4 mm provided. Available in sizes of 0.4, 0.8, 1.0 mm | |
| Extruder Temperature | | Up to 275°C | |
| Hot end heat up time | | < 2 mins | |
| Extrusion Type | | Geared drive | |
| Print Speed | | 1000 mm/min | |
| Travel Speed | | 2000 mm/min | |
| Materials Supported | | PLA | |
| Filament Diameter | | 1.75 mm | |

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| **SUBTRACTIVE MANUFACTURING – 3 AXIS + 5 AXIS** | | |
| Work Area | | 3-axis : 200 x 200 x 200 mm  5-axis: 150 ⌀ x 150 mm |
| Materials Supported | | Wood, Plastics, Wax, Foam |
| Spindle motor specification | Power | 800 W |
| Speed | 12000 - 24000 rpm (Variable) |
| Drive | Inverter drive |
| Tool Holder | ER-11 |
| Cooling | Air cooled |
| Maximum Feed Rate | | 1000 mm/min |
| Maximum Traverse Rate | | 2000 mm/min |
| Load Bearing Capacity | | 10 kgs |