

# Material Management System v2 with HEPA/VOC<sup>3</sup> Control

Industry-leading Material Handling & Health Safety



## Enhanced Material Performance & Life

- Keep materials dry and printing at their best<sup>1</sup> (<5%, <10% or <20% RH)
- Stop materials and part quality from degrading over time
- Have multiple materials dry and ready to print quickly & easily without storage hassles

## Monitor Material Quantities in Realtime

- Live readout of remaining material of each of 6 reels on MMS display on included 10" wireless tablet
- Remote readout via web browser of type of material loaded at each position, and its remaining length<sup>2</sup>

## Cost Effective Manufacturing

- Optimize material usage while saving time, reducing failed prints and improving part quality
- 24 x 7 printing with remote monitoring & control

Physical Dimensions	
Width	38.125" - 96.84cm
Height	32.5" - 82.55 cm
Depth	36" - 91.44 cm
Weight	~ 290 lbs - 132kg
Shipping Size & Weight	42" x 42" x 36" 370 lbs - 168 kg
Voltage Requirement	220V - 15 Amp

<sup>1</sup>download our white paper to learn why dry materials are critical to successful industrial 3D printing.

<sup>2</sup>some data must be input or selected.

<sup>3</sup>Volatile Organic Compounds

## Material Performance Enhancing Safety, Storage & Measurement Solution

Introducing Plural's Material Management System v2 for optimized material handling with integrated HEPA and volatile organic compound health protection.

MMS guarantees that materials are always dry, optimizing bonding and providing the best possible surface finish, appearance and performance.

The automated weighing and reporting system provides you with real-time remaining material status for up to six spools at a time (from 4kg to 500g spools), any three of which are fed to the printer.

MMS also manages power, requiring only one 220V connection for the cabinet which supplies the correct power and voltage to the printer, the print server, 5 USB ports and the web camera.

The MMS system includes an industrial, fanless print server with the power to support live video streaming of HD quality print monitoring, and increases storage from 16GB SD card standard with the printer to 128GB SSD for time-lapse recordings, virtually unlimited gcode storage and increased robustness.

v2 adds chamber heating (35°C) to

the powerful desiccant drying solution, integrated HEPA filtration with activated charcoal stage to control VOCs, increased connectivity options and 10" wireless tablet control.

Enabling industry-leading safety, print quality, part size capability and user convenience, 3ntr printers with MMSv2 offer the best, most cost-effective open material industrial AM solutions available.

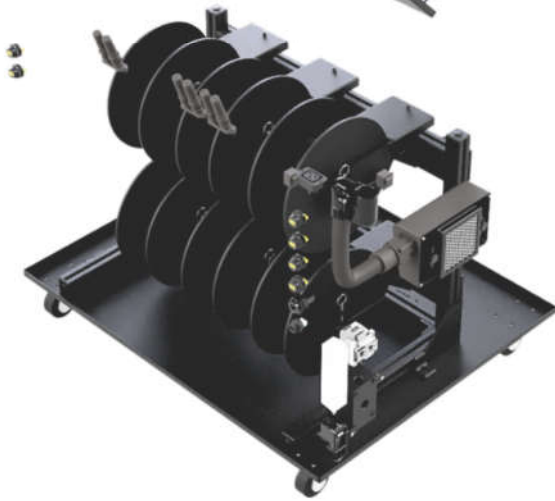
For more details on Plural's industrial 3D printing/Additive Manufacturing solutions visit [pluralam.com](http://pluralam.com).



MMSv2 comes with wireless touchscreen control for the printer and the MMS.

# Material Management System v2

For Optimum 3D Printing Performance



Additional storage for up to 10 reels

Dash

## MMS Summary

Unit Settings-  
Weight Length Diameter Temperature

3 2 1  
Reel of spool

A B C  
D E F

MMS-  
Unit Name : PluralMMS RH : 5.8% | Temp : 23.20 C

Nozzle_1	Nozzle_2	Nozzle_3
Diameter : 0.6 mm Material Diameter : 2.85 mm	Diameter : 0.6 mm Material Diameter : 2.85 mm	Diameter : 0.6 mm Material Diameter : 2.85 mm
<b>Reel_A</b>   Extruder : #3 Material : <b>SSU00 - Black</b> Diameter : 2.85 mm Reel Weight : 2.00 Kg Live Weight : 0.21 Kg Remaining Filament : Infinity m	<b>Reel_B</b>   Extruder : not fed... Material : <b>SU301</b> Diameter : 2.85 mm Reel Weight : 1.00 Kg Live Weight : 0.17 Kg Remaining Filament : 23.80 m	<b>Reel_C</b>   Extruder : #1 Material : <b>ASA</b> Diameter : 2.85 mm Reel Weight : 4.00 Kg Live Weight : 0.82 Kg Remaining Filament : 118.44 m
<b>Reel_D</b>   Extruder : not fed... Material : <b>SSU00</b> Diameter : 2.85 mm Reel Weight : 2.00 Kg Live Weight : 0.15 Kg Remaining Filament : 22.19 m	<b>Reel_E</b>   Extruder : #2 Material : <b>ASA - Black</b> Diameter : 2.85 mm Reel Weight : 2.00 Kg Live Weight : 1.23 Kg Remaining Filament : 174.87 m	<b>Reel_F</b>   Extruder : not fed... Material : <b>ASA - Black</b> Diameter : 2.85 mm Reel Weight : 2.00 Kg Live Weight : 0.32 Kg Remaining Filament : 45.17 m

Knowledge Base
Open Support Ticket



6 reels monitored live for remaining filament

Sys
PluralAM - MMS

Ext1 0.40 2.05	Ext2 0.40 2.05	Ext3 0.40 2.05 6H
A Ext2 2.00 kg <b>102.29</b> <small>SSU00</small>	B Ext1 2.00 kg <b>507.74</b> <small>ASA</small>	C 2.00 kg <b>286.56</b> <small>ASA</small>
D 2.00 kg <b>229.24</b> <small>SSU00</small>	E 1.00 kg <b>13.63</b> <small>SSU00</small>	F 1.00 kg <b>32.94</b> <small>SSU00</small>
2.2 %RH	28.7 C	meters



pluralam.com

877-453-5506 | info@pluralam.com