MACHINES
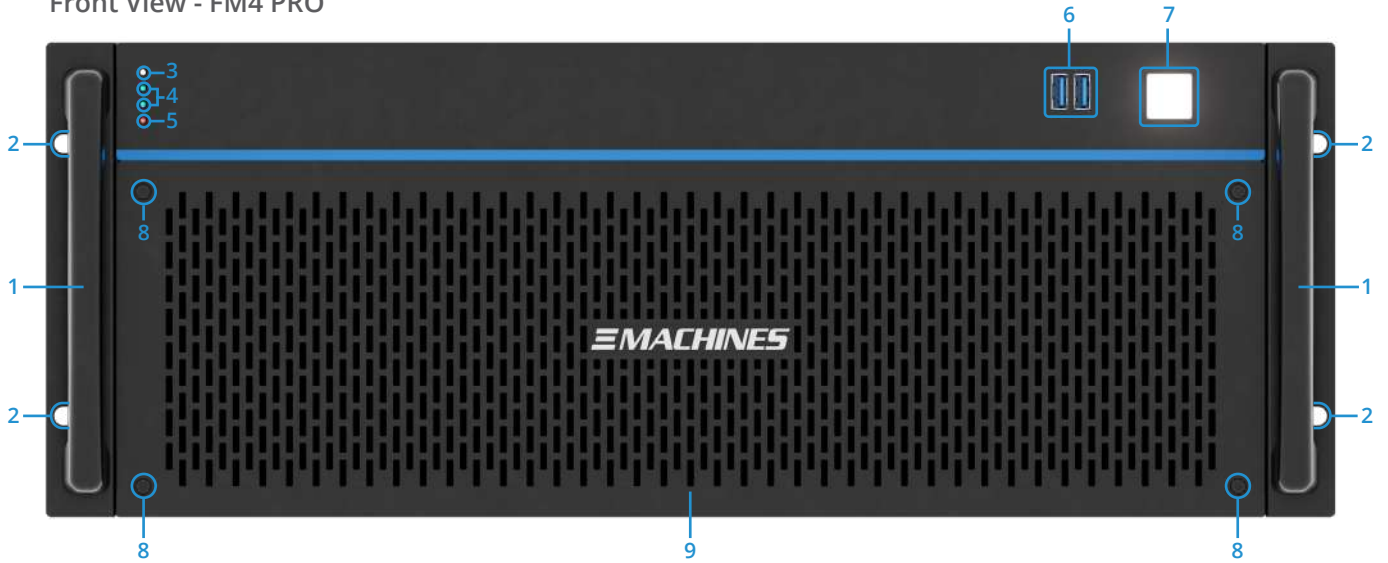
flexible mediaserver FM4 PRO

TECHNICAL SPECIFICATIONS

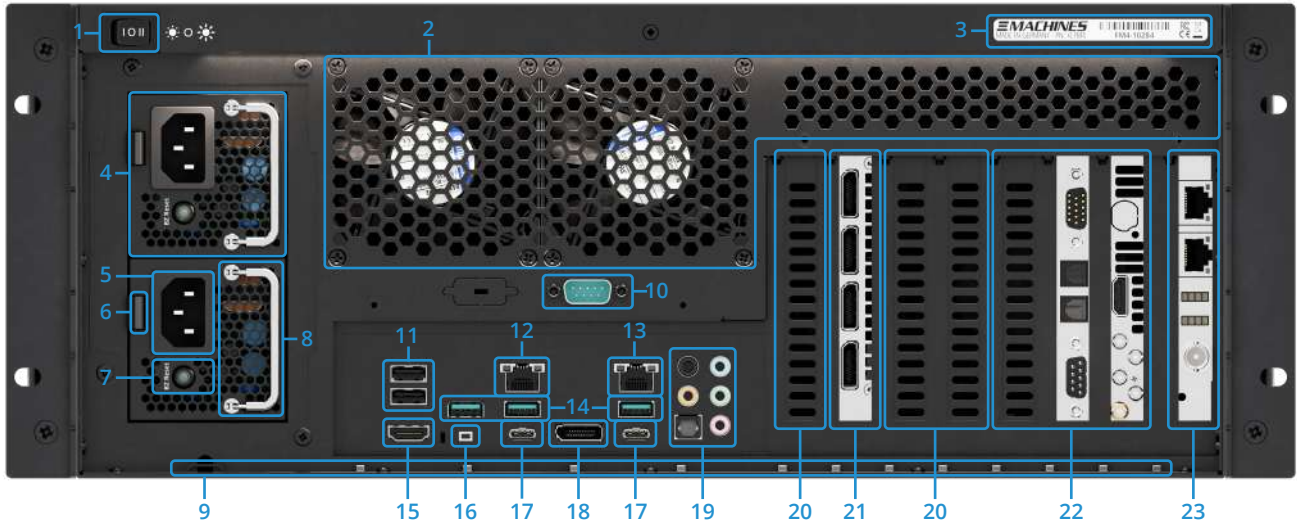# Overview & Connections

Front View - FM4 PRO

1	**Rack Handles** Use these to handle your FM4. The rack handles can be removed if required.	**2**	**Mounting holes for Rack Screws** Use corresponding screws to secure your FM4 in a rack.	**3**	*No function / FM4 MAX Exclusive Feature.* **UID LED (Unit Identification)** Helps locate a specific FM4 MAX server in a rack of many. The LED lights up when the UID button on the back of your FM4 MAX is pushed.
4	*No function / FM4 MAX Exclusive Feature.* **Network Activity LED** Shows working network connection and network activity of the integrated Ethernet ports of your FM4 MAX (flashing is normal).	**5**	*No function / FM4 MAX Exclusive Feature.* **Error LED** Lights up in case of system error such as overheat, fan fail or similar. If the LED is lit, check the FM4 MAX for errors or consult your integrator and/or support technician.	**6**	**USB 3.1 Type-A Ports** Use these to connect USB Type-A devices to your FM4.
7	**Illuminated Power Button** Press Button once to start your FM4. Push and hold to force a shutdown.	**8**	**Bezel Screws** Loosen these to access the integrated dust filter for maintenance purposes.	**9**	**Air Intake** Fresh air supply for the FM4. Do not block! Regularly check the dust filter behind for dirt and clean if necessary.

Rear View - FM4 PRO

1	Rear Light Switch Controls the integrated rear LED lighting (I = Dimmed / O = Off / II = Bright)	2	Air Outlet Heated air from inside of the FM4 will exhaust from here. Do not block!	3	Nameplate Displays various information about your FM4, such as model number, serial number, etc.
4	Redundant Power Supply For increased reliability your FM4 is equipped with two PSUs. If one fails, your FM4 will still operate but sound alarm. Reset the alarm by pressing the reset button (7). The PSU is hot-pluggable during operation.	5	IEC Power Connector Use this to connect your FM4 to a power source. Important: Both power supplies must be connected to the power network, or an alarm will sound. (Different power circuits recommended!)	6	Power Supply Release Lever Gently push the lever towards the power connector, then use the power supply handle (8) to pull out the power supply.
7	Alarm Reset Button Pressing this button will silence the power supply alarm and disable the alarm LED.	8	Power Supply Handle Fold the handle 90° and gently pull out the power supply. Important: Press the power supply release lever (6) at the same time!	9	Strain Relief Rail To avoid accidental damage to your FM4, we recommend using cable ties to secure the wiring. Your FM4 features 13 dedicated holders for this. (Cable ties included)
10	Serial Port Use this to connect serial devices to your FM4. (9-Pin RS-232 COM connector)	11	USB 2.0 Type-A Ports Use these to connect USB Type-A devices to your FM4 PRO.	12	1Gbit/sec Network Ports Use these to connect your FM4 PRO to a network via a RJ45 cable. Maximum speed 1Gbit/s Ethernet.
13	2.5Gbit/sec Network Ports Use these to connect your FM4 PRO to a network via RJ45 cables. Maximum speed 2.5Gbit/s Ethernet.	14	USB 3.2 Type-A Ports Use these to connect USB Type-A devices to your FM4 PRO.	15	HDMI 2.1 Port Control monitor output to display the graphical user interface (GUI).
16	Push Button No function. Manufacturer use only.	17	USB 3.2 Type-C Ports Use these to connect USB Type-C devices to your FM4 PRO.	18	DisplayPort Connector No function. Manufacturer use only.
19	Audio Connectors Use these to connect audio devices to your FM4 PRO. 5x analog (3.5mm jack), 1x optical (S/PDIF).	20	Slot Covers FM4 PRO air vent - No further function.	21	Main Display Outputs (DP 1.4) Use these to connect your display devices to your FM4, e.g. projectors, LED wall controllers, displays.
22	Expansion Options Used for optional FM4 PRO expansion options. For information on all expansion options available for the FM4 PRO, please contact our sales team.	23	Synchronization-Option Dedicated slot for optional sync-module. Enables frame-accurate synchronization of multiple FM4 servers. Caution: Do not connect to LAN, risk of damage!		

Technical Specifications

Applications	Validated for [1]	Pandoras Box, Pixera, Watchout, Vertex, Screenberry, Resolume, Touch Designer, Ventuz, vvvv, Unreal, Unity, Notch, vMix, OBS, Vioso, Madrix, POET, Universe
	Software License	Included or excluded depending on project requirements
Display Output	Number and Type	4x DisplayPort 1.4
	Maximum Resolution @120Hz	4x 4096 × 2160
	Maximum Resolution @60Hz	4x 5120 x 2880 | 2x 7680 x 4320
	Color Depth Support	8bit | 10bit | 12bit
	EDID Management	Yes
	Synchronization (Framelock, Genlock)	optional
	Control Monitor Outputs (GUI)	Yes (1x HDMI)
Video	Video Input	optional (SDI, HDMI, DisplayPort)
	NDI Support	Yes
Audio	HD Audio	5x 3.5mm mini-jack, 1x optical
	Dante VS	pre-installed [2]
Network	RJ45 Ports	1x 2.5Gbit/sec Ethernet 1x 1Gbit/sec Ethernet
	WiFi	No
	Bluetooth	No
Peripheral	USB Ports	2x USB 3.2 Gen 1 Type-A (Front) 2x USB 3.2 Gen 2 Type-C (Back) 3x USB 3.2 Gen 2 Type-A (Back) 2x USB 2.0 Type-A (Back)
	Serial Port	1x 9-Pin RS-232 COM Port
Storage	System	500GB NVMe Drive
	Content	1TB High Speed Storage (up to 7.3GB/sec)
Expansion Options	Maximum configurable number	3 + Synchronization Option (dedicated slot)
	Display Output Options	Nvidia RTX A5000 Nvidia RTX A6000
	Synchronization Option	Framelock/Genlock functionality
	Video Input Options	SDI HDMI SDI+HDMI DisplayPort
	Audio Options	Analog Dante AES
	Network Options	10Gbit/sec Ethernet 1Gbit/sec Ethernet
	Storage Options	Storage Options 2TB, 4TB (up to 7.3GB/sec) High Capacity Options 8TB, 15TB (up to 6.6GB/sec)

	Memory Option	64GB System Memory
	Silent Option [3]	Low-noise optimization for use in noise-sensitive environments (Swap of redundant PSU with single silent PSU and other silent modifications)
Physical Specifications	Dimensions Unit (WxHxD)	430mm x 177mm x 399mm | 16.93" x 6.97" x 15.71"
	Dimensions Unit+Handles [4] (WxHxD)	482mm x 177mm x 399mm | 19.00" x 6.97" x 15.71"
	Rack Installation Depth (D)	395mm | 15.55"
	Weight [5]	17,5kg | 38.58Lbs
	Redundant Power Supply	Redundant hot plug (2x 900W, 100-240V AC, 10-6A, 50-60Hz)
	Power Consumption [5] idle/typical/max	95W / 350W / 420W
	Heat Dissipation [5] idle/typical/max	324BTU/h / 1194BTU/h / 1432BTU/h
	Noise Emission [5,7] idle/typical/max	39.9dB / 47.9dB / 50.6dB < 20dB / 45.0dB / 46.5dB (when choosing the Silent Option [3])
	Operating Temperature	10°C - 36°C | 50°F – 97°F
	Relative Humidity	10% to 90% non-condensing
Hardware Specifications	Hardware Platform	Professional-Class
	Certified for 24/7 Operation	Yes
	Cruise Ship optimized	Yes
	Hardware Security	Yes (TPM 2.0)
	Remote Management	No
	Illuminated Power Switch	Yes
	Integrated Rear LED lighting	Yes (2 Brightness Levels)
	Integrated Rear Strain Relief Bar	Yes
	Unit Identifier Button & LED	No
	Internal USB License Dongle Holder	Yes (2-Port)
	Processor	AMD Processor (12 Cores / 24 Threads / max 5.6Ghz)
	Graphics Accelerator	Nvidia RTX A4000
	System Memory	32GB
	System Memory Channels	2 Channels (used simultaneously)
	System Memory ECC	Yes (integrated real time Error Correction)
	Operating System	Dedicated FM4 optimized Windows OS
	Bundled Accessories	Keyboard, Mouse, Power Cables, Cable Ties, Hardware Guide, Recovery USB Stick
Norms & Certifications	Norm	DIN 15781 (Entertainment technology - Media Server)
	Certifications	CE, FCC
Warranty & Support	Warranty	2 years (extended warranty for 3 / 4 / 5 years optional)
	Premium Support	Included (during warranty period)

[1] Your software not included? Talk to us!
[2] Software license required
[3] Only selected Expansion Options available
[4] Rack handles removable
[5] Based on base configuration - values vary depending on Expansion Options selected
[7] Measurements taken in sound lab at distance of 1m / 39.4"