

sat-nms MCU-V-AC – Motor Control Unit

Are you looking for an easy replacement solution for your existing CPI/Vertex 7150 Motor Drive cabinet?

The **sat-nms MCU-V-AC** is exactly what you were looking for! It fits all antenna types with induction AC motors up to 7.5kW and is fully compatible with existing CPI/Vertex 7200 Antenna controller or the **sat-nms ACU2-19V2** as state-of-the-art Antenna controller as alternative.

It comes with pre-configured frequency inverters for easy starting-up.

The standard configuration already includes an interface for **LCPHD-PT** handheld controller. This interface is also compatible to the CPI/Vertex PMCU Handheld, including angle position and beacon level display!

The position of terminals is comparable to the 7150 cabinet, so it is easy to re-use existing cabling.

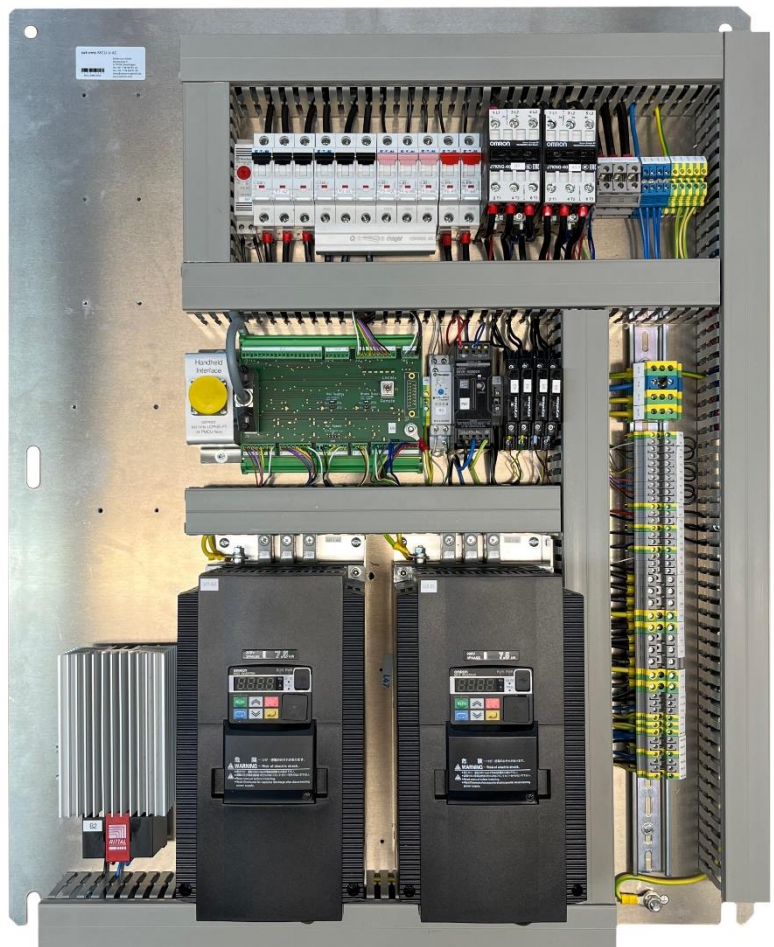
To minimize the installation effort, usually the existing Vertex/CPI 7150 cabinet can be re-used. Therefore, the **sat-nms MCU-V-AC** comes as a plate that is installed to the existing cabinet on site.

As alternative a version with a new cabinet, made from powder coated aluminum, is available as well.

A lot of options are available to tailor the control cabinet along your demands.

The cabinet is available in two versions:

- 1) **MCU-V-AC**: plate only version without cabinet for installing into existing cabinet (mechanical compatible to Vertex/CPI 7150 cabinets)
- 2) **MCU-V-AC-cab**: cabinet version (760x945/920x300mm).



MCU-V-AC 200V Version with 7,5kW inverters

Key Features

- Electrically and mechanically compatible to CPI/Vertex 7150 Cabinet
- To be controlled by existing CPI/Vertex 7200 or by **sat-nms ACU2-19V2**
- Existing cabling can be reused
- Project specific pre-configured frequency inverters for easy setup
- Options available for nearly all demands

Technical Specification

General Specifications	MCU-V-AC		remark
	plate	cabinet	
Frequency inverter AZ+EL standard. power (each)	1.5kW	1.5kW	specify motor power and voltage at time of order.
Frequency inverter AZ+EL max. power (each)	7.5kW	7.5kW	Standard voltage: 400V, 200V Type on request
POL drive standard (230V AC) current max.	2A	2A	
Handheld interface incl. display of angles and beacon level	✓	✓	interface suits <i>sat-nms LCPHD-PT</i> and Vertex PMCU
Motor control interface	✓	✓	Digital Inputs/Outputs via optocouplers compatible to CPI/Vertex 7200 and <i>sat-nms ACU2-19V2</i>
Antenna stop switch mounted to the cabinet	*1)	✓	*1) existing switch will be reused

Available Options (not included in standard version)	options to be ordered separately		
230V Power Outlet IP66 with separate RCD	n/a	✓	Only available with German "Schuko" connector
R/C combination for 2-phase POL Motors	✓	✓	Specify type at time of order
cooling fan (IP54), incl. thermostat	n/a	✓	
cooling fan (IP56) with rain cover, incl. thermostat	n/a	✓	recommended when rain together with strong wind is expected
Sunshield (front or rear)	n/a	✓	strongly recommended when cabinet is exposed to sun radiation
Mounting kit for basement mounting	n/a	✓	
Storage tray for Handheld	n/a	✓	
Motor-, Encoder-, Limit switch-cabling (project specific)	on request	on request	SatService as a system integrator is able to realize turn-key projects for refurbishment of your existing antenna or installation of a new antenna! We also deliver and set up complete receive- and transmit-Systems including optical signal transmission to realize your new satellite ground station.
Mechanical Adapters to replace existing Encoders by state-of-the-art digital encoders (project specific)	on request	on request	
On-Site integration and setup (project specific)	on request	on request	

Electrical and Mechanical Specification, Environmental Conditions

	MCU-V-AC	MCU-V-AC-cab
Supply Voltage Mains	3x400V AC (10mm ² /AWG8 max.) standard, 3x200V AC on special request	3x400V AC (10mm ² /AWG8 max.) standard, 3x200V AC on special request
Motor terminals	4mm ² /AWG12 max, larger cross section on special request	4mm ² /AWG12 max, larger cross section on special request
external Antenna Stop interface	NC dry contact	NC dry contact
Ambient Temperature Range operational	-20° to 35° C (up to 45° with optional cooling fan)	-20° to 35° C (up to 45° with optional cooling fan)
Protection class	n/a	IP66 (without fan option)
Humidity	Up to 90% non-condensing	Up to 90% non-condensing
Cabinet size WxHxD	690x850x250 mm	760x945/920x300 mm
Mounting hole pattern	639x793xmm (6xø12mm)	720x880mm (4xø9mm)
Weight	~25...45kg depending on frequency inverter type (weight without options)	~40...60kg depending on frequency inverter type (weight without options)