



# ARTECO

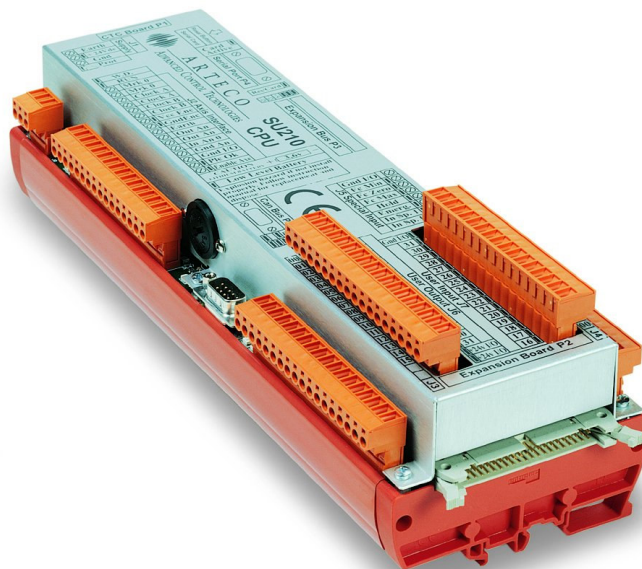
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## MOTION CONTROL TECHNOLOGIES

### SU210

**SU210** is an one axis Numerical Control unit with integrated PLC, programmable to IEC 61131-3 standard and fitted with 19 on-board user inputs and 16 user outputs (expandable) or with 35 on-board user inputs and 32 user outputs (expandable). SU210 can be expanded to 448 I/O and 3 axis. It can manage Can-Bus and ModBus communication protocols. Using the remote assistance module, SU210 can be controlled through the internet.

Arteco Motion Tech developed a comprehensive library of functions specifically dedicated to axis movement that ensures important integration with the available programming languages.



CHARACTERISTICS	DESCRIPTION	NOTES
<b>Power supply requirements</b>		
Power supply voltage	24 Vdc $\pm$ 20%	Protected by electric fuse , isolated, reading by software
Absorption	0,5 A	
Buffer battery	Inorganic Lithium – AA-3,6Volts	Replaceable by the operator
Voltage monitoring	24 Vcc, 5 Vcc, 12 Vcc, -12 Vcc Backup battery	LED on when supply voltage is OK LED on when supply voltage is not OK, readable by software
<b>CPU</b>		
Microprocessor	SAB167CR, 20 MHz, 16 bit	Optional 40MHz
Available working memory	RAM 600K	Supplied by battery, write protected against power down and reset
External memory	Sim Card 1 Megabyte	Upload / Download of firmware and/or working program
Monitoring functions	Watch Dog on Cpu PLC active Watch Dog on PLC	LED on when unit is working correctly LED on when PLC is active LED on when CNC is active
<b>INTERFACES</b>		
Asynchronous basic serial	1 line RS232/RS485	Both available, selectable by jumper
Asynchronous serial expansions	2 lines RS232/RS485	Available on serial expansion module
Fieldbus	CANOpen Modbus	Master mode Standard mode and ISaGRAF®, on board
Connections to HMI	By RS232 / RS485 Modbus	Full compliance with many third part HMI equipments
<b>INPUT AND OUTPUT</b>		
On board user input	19 optoisolated input 24 Vcc PNP	Version 32 I/O
On board user output	16 optoisolated output 24 Vcc PNP 1,8A each output, Max 4,4A for each group of 4 output	Version 32 I/O Protected against short circuit, overcurrent, overtemperature, overvoltage and reverse voltage connection.
On board user input	35 optoisolated input 24 Vcc PNP	Version 64 I/O
On board user output	32 optoisolated output 24 Vcc PNP 1,8A each output, Max 4,4A for each group of 4 output	Version 64 I/O Protected against short circuit, overcurrent, overtemperature, overvoltage and reverse voltage connection
On board analog user input	1 analog input $\pm$ 10Volt	Resolution of 10 bit, overvoltage protected
On board analog user output	1 analog output $\pm$ 10Volt	Optional, Resolution of 10 bit, overvoltage protected
<b>AXIS MANAGEMENT</b>		
Number of axis	1 analog axis on board	Expandable to 2 on board analog axis, 4 axis by external expansion Expandable to 2 On-Off on board axis , 14 analog axis by CANBUS
Encoder counting	200 KHz, 32 bit	Internally Multiplied x 4 ; 400KHz If option CPU @ 40MHz included
Encoder interface	Push Pull, Line Driver, 5Vcc, 12Vcc	Selectable by Jumper
Axis monitoring	Watch Dog Axis limit switch	Disable axis in case of fault Hardware & Software
Movement control	PID o Feed-Forward Automatic adjustment Offset	Available via Software Available via Software
Axis performance	Positioning Ramp "S" Interpolation Electric axis	Advanced algorithms
<b>DEVELOPMENT TOOLS</b>		
Development environment	ISaGRAF®	Compliance to standard IEC 61131-3
Available programming languages	SFC, FDB, LD, ST, IL, FC	
Advanced features	Function symbols to manage the axis Function symbols to manage the variables, Own Part-Program, Function symbols to manage the personalization of the serial port	In adding to the standard IEC 61131-3 programming languages In adding to the standard IEC 61131-3 programming languages In order to manage high level programming language In adding to the standard IEC 61131-3 programming languages
Field connections	Connected by Cannon Sub-D 9 connector	
Case	Shielded	Dimensioni: 306mm x 108mm h 75mm
Mounting	For DIN guide	
Certifications	CE EN 50081/2, EN50082/2	Certified bi ARTECO