

UR60 Remote Unit

The UR60 device is a remote numerical control designed to be placed on a DIN bar.

The control include serial and Ethernet communications (RS232 and RS422/485), CAN bus field, control of up to 6 analog axes, 8 digital axis on Mechatrolink bus, 4 analog inputs and 2 analog outputs auxiliary, 16 Internal Inputs and 16 internal Outputs, I/O expansion on BLT or CAN.

The CPU used is a FREESCALE MCF5235 ColdFire Processor at 150Mhz that is compatible with the others TESE products and permits future development with the higher-performance ColdFire family.



CHARACTERISTICS	DESCRIPTION	NOTES
	GENERAL	
Dimensions	220 mm x 150mm x50mm	-
Installation	On DIN bar	-
Weight (plus DIN bar hook)	approx. 700 g	-
Operating environment	Industrial	-
Protection class	IP20	-
Operating temperature	From 0° to 50°C	-
Operating humidity (without condensate)	≤75%	-

CHARACTERISTICS	DESCRIPTION	NOTES
ELECTRICAL		
Supply voltage	DC 24V \pm 10% AC 24V \pm 10%	-
Power supply	To be defined	-
Buffer battery	CR2032 Battery	-
Encoder power supply	+5V / +12V (Line Driver / Open Collector)	- Internal power supply
Analog outputs	\pm 10V 16 bit	-
CONNECTIONS		
Serial	1 RS232C line	- Su DB9
Ethernet	1 Ethernet connection to user interface PC	- RJ45 – Auto sense
Field bus	2 CANOpen line	- DSP-DS301/401 communication protocol - on 5-pin connector - Rotoswitch to the address selection
USB connector	For local upgrade and downgrade	- Mass Storage
Mechatrolink	1 Mechatrolink connector	- Omron / Yaskawa proprietary field-bus
Local bus	1 line for local control of 80 inputs/outputs	-
Encoder inputs	6 encoder inputs +5/+12V Line driver - Open collector	
In-flight position connection inputs	6 inputs for PNP position connection	
Reference switch inputs	6 digital inputs as reference switch	On axis connector
Analog Outputs	2 analog outputs \pm 10V 16 bit	- on one DB9 connector
Analog Inputs	4 Analog Inputs 1 potentiometer power supply +10V	- on DB9
Internal PLC Inputs and Outputs	16 Inputs + 16 Outputs	
CPU		
Microprocessor	FREESCALE MCF5235 @150MHZ	
Working memory	Flash 2MB, parallel 16bit RAM 1MB 16bit RAM 2MB fast static	- Battery Buffered
AXIS		
Encoder interface	Line driver, Open collector 5/12V	- Configurable with jumpers
Encoder count	500 KHz with multiplication by 4	-
Real Time	3/6 msec with PLC scanning time programmable from the application	-
Analog reference	\pm 10 Volt	- 16bit resolution with mark
Limit switch inputs	1 per axis	-
In-flight position connection inputs	1 per axis	-
Axis Monitoring	- Axis disable in case of error - Software limit control - Tracking error control	
Drive Control	- Motion control on individual axis - Possibility of in-flight position connection for high-precision mode	- Based on fully-developed PID -
Axis performance	- Automatic axis offset connection - Positioning with trajectory control - Linear and circular interpolation - Automatic interpolation speed adjustment on the connectors and direction change - S-ramp - Interpolation with 2 C-axes for tangent cutting - Electrical axis (Gantry)	- - - Possibility to define the working plane in the space - - -
SOFTWARE		
Development and analysis environment	SyncroView32	- Automatic monitoring of the last 6 sec. - For the axes, dedicated instructions for punching and form-pressing functions
Languages available	- PLC on IL basis (Instruction List) - SBL	- Possibility of defining parallel processes - Set of commands for motion control (axes) with parallel processes and interaction with and by the PLC
EXPANSIONS		
Tecnos Module on BLT	Digital inputs, Digital outputs, Relay outputs, D/A converter module, A/D converter module,	Maximun number of I/O: 80IN+80OUT



Teseo

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