

# UR055 Remote Unit

The UR055 device is a remote numerical control designed to be placed on a DIN bar.

The control include serial communications (RS232 and RS422/485), CAN bus field, control of up to 5 axes, 4 analog inputs and 2 analog outputs auxiliary and I/O modularity on BLT (Tecnos Local Bus) or CAN.

The CPU used is a Motorola 40 MHz ColdFire which maintaining the compatibility with the others tecnos products permits future development of machines with the higher-performance ColdFire family.



Cod. H2UR055XXX

CHARACTERISTICS	DESCRIPTION	NOTES
	<b>GENERAL</b>	
Dimensions (LxHxD)	195mm x 170mm 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%	-
Max operating altitude	2000m	-

CHARACTERISTICS	DESCRIPTION	NOTES
<b>ELECTRICAL</b>		
Supply voltage	DC 24V ±10% AC 24V ±10%	-
Absorption	To be defined	-
Buffer battery	VL2320 - 3 V	-
Encoder power supply	+5V / +12V (Line Driver / Open Collector)	- Internal power supply
Analog outputs	±10V 16 bit	-
<b>INTERFACES</b>		
Serial	1 RS232 line and 1 RS422/485 line	- Su DB9
Field bus	1 CANOpen line	- DSP-DS301/401 communication protocol - on 5-pin connector - Rotoswitch to the address selection
Local bus	1 line for local control of 80 inputs/outputs	-
Encoder inputs	5 encoder inputs +5/+12V Line driver - Open collector	-
In-flight position connection inputs	5 inputs for PNP position connection	-
Limit switch inputs	5 digital inputs as limit switches	-
Analog Outputs	2 analog outputs ±10V 16 bit	- on one DB9 connector
Analog Inputs	4 Analog Inputs 1 potentiometer power supply +10V	- on DB9
Terminal connection	1 connector to remoted connection for CN050 until maximum 3mt	With panel display 128x240 and keyboard with 39keys
<b>CPU</b>		
Microprocessor	Motorola MCF5206E with 40MHz clock	-
Working memory	Flash EPROM 1MB, parallel. 16-bit RAM 1MB 16-bit buffered	- - Buffered
<b>ASSI</b>		
MAX number of axes controllable	5	-
Encoder interface	Line driver, Open collector 5/12V	- Configurable with jumpers
Encoder count	500 KHz with multiplication by 4	-
Real Time	6 msec with PLC scanning time programmable from the application	-
Analog reference	±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 - - - - - -
<b>SOFTWARE</b>		
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 (Tecnos 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
<b>EXPANSIONS</b>		
Tencos Module on BLT	Digital inputs, Digital outputs, Relay outputs, D/A converter module, A/D converter module,	Maximum number of I/O: 48IN+48OUT
CAN-BUS coupler module	- 18 VAC / +24VDC power supply - Absorption: 60 mA - Output voltage: +24 VDC 300 mA	- The maximum number of inputs/outputs controllable by the CANOpen Node are 64 inputs plus 64 outputs mixable over 8 x 8 modules. - Remote connection via CANOpen