

INTEGRA QUADRO² CONTROLLER



General Information:	
Printing technology:	Thermal Inkjet Technology
Supported printing technology:	HP, LX, MX, XR
Max. Number of printheads:	8
Max. number of production lines:	4
Weight:	2300 g
Length:	191 mm
Width:	250 mm
Height:	85 mm
Temperature range:	5 to 40°C
Relative humidity, maximum (non-condensing):	10 to 90 %
Maximum operating time:	The device is designed for continuous operating

Special features:

- Compact design / less space required
- Fastenings on the controller, for easy mounting inside or directly on industrial lines and in control cabinets
- With top hat rail clip for control cabinet mounting
- Control of max. 8 print heads
- Simultaneous operation on 4 production lines (up to 2 print heads of different technologies per production line)
- Supply voltage 24V – supply can be made directly via the control cabinet or via an external power supply unit
- Completely remote controllable via idesign8

Restrictions:

- No possibility to set parameters via HMI interface
- No label creation on site

Connection parameters Electrical:	
Voltage (Device)	24 V DC
Current consumption, max.	4 A
Power consumption, max.	100 W
Protection class	IP 40
Standby power input	< 10 W
Power supply Electrical:	
Input voltage at the power supply	90 bis 240 V AC
Frequency power supply.	50 bis 60 Hz
Power consumption, max.	0,5 A
Current consumption, max.	80 W
Protection class	IP 40D
Standby power input	< 18 W
Data interfaces:	
USB	2x USB A
USB	1x USB B
Ethernet	1x RJ45
RS 232	2x Sub-D 9 Pol male
Sensor	24V ±10% < 100mA
Encoder	24V ±10% < 100mA
USB	5V ±10% < 100mA

Note: The switching threshold of the inputs is $12V \pm 2V$.

The sensors / encoders must be designed for 24V operating voltage. E.g. 24V + - 10% or 10V – 30V

The inputs are NPN as standard, but can be switched to PNP with the idesign software.

Performance data:	
Cable length (other lengths on request)	2
Max. Cable length print head	
HP	13
LX/MX/XR	50
Text layout	idesign8+ Software
Parameter input	idesign8+ Software
Fonts	all available Windows fonts print fonts for variable data optional: customer-specific fonts
Print height in mm	
HP/LX printheads	1 to 100 mm
MX printheads	3 to 800 mm
XR printheads	1 to 568 mm
Max. print resolution ¹⁾ in dpi	
HP/LX printheads	900
MX printheads	600
XR printheads	600
Max. vertical print resolution in dpi	
HP/LX printheads	300/600
MX printheads	192/62 (channel)
XR printheads	180
User language Software	Not available
Barcodes	EAN 8, EAN 13, EAN 128, 2/5 ITF, 2/5 with check 128, UPC A, UPC E
2D Codes	GS1-Datamatrix, Datamatrix, QR-Code
Automatic functions	Date, Time, Counter, Variable, customized links ¹⁾
Graphic	Monochrome Bitmap-graphics can be created with Paint for example, or other software
Text storage in GB	Max. 1
Font- and Logo storage in GB	Max. 1
Storage in GB (optional expandable)	4
RAM in MB	64
Max. print speed in m/min	
HP at 300 dpi	90
HP at 300 dpi HiSpeed ¹⁾	180
Barcodes	max. 60
Max. print speed in m/min	
LX at 300 dpi	90
LX at 300 dpi HiSpeed ¹⁾	240
Barcodes	max. 90

Max. print speed in m/min MX at 300 dpi Barcodes	60 60
Max. print speed in m/min XR at 180 dpi Barcodes	67 60
Print direction	L/R or R/L, from top or side. Print from bottom is not possible

¹⁾ Not available in all Markoprint integra Quadro² versions

Connections:	
External Sensor	8x
Internal Sensor	-
Encoder	4x
Status / Alarm outputs	8x
Potential free contacts	8x
Inputs	16x
USB A for USB-B-Stick	+
USB interface	USB B
EIA232	+

System versions:	Advanced	Pro
Layout length in m	1	3
Text	+	+
Counter	+	+
Time	+	+
Date	+	+
Date offset	+	+
Logos	+	+
Variables	+	+
Action fields	+	+
Barcodes	+	+
2D Codes	+	+
USB-Stick Data transfer	+	+
Ethernet interface	+	+
EIA232	+	+
Password protection	-	+
Configurable in- /outputs	+	+
DBPrint	-	+

Technical drawings integra Quadro²:

