Micro800 Power Requirements(1)

Controller/Module	Power Requirement
Micro810 12-point (with or without LCD)	3 W (5V A for AC module)
Micro820 20-point(2) (without plug-ins, max)	5.62 W
Micro830 and Micro850 (without plug-in/expansion I/O) 10/16-point 24-point 48-point	 5 W 8 W 11 W
Plug-in modules, each	1.44 W
Expansion I/O (system bus power consumption)	2085-IQ16 – 0.85 W 2085-IQ32T – 0.95 W 2085-IA8 – 0.75 W 2085-IM8 – 0.75 W 2085-OA8 – 0.90 W 2085-OB16 – 1.00 W 2085-OV16 – 1.00 W 2085-OW8 – 1.80 W 2085-OW16 – 3.20 W 2085-IF4 – 1.70 W 2085-IF8 – 1.75 W 2085-OF4 – 3.70 W 2085-IRT4 – 2.00 W

(1) When setting up a Micro800 system, verify that total power consumption of the controller, plug-in and expansion I/O does not exceed the output power capacity of the power supply used. See External Power Supply (2080-PS120-240VAC) on page 59 for power supply specifications.

(2) Micro820 controllers require a maximum of 8.5 W with plug-ins.

Micro800 Plug-in Modules and Accessories – Features and Compatibility

Plug-in / Accessory	Supported by Micro810	Supported by Micro820	Supported by Micro830/Micro850	Feature
1.5" LCD and Keypad 2080-LCD	Yes	No	No	• backup module for Micro810 controllers • configure Smart Relay Function Blocks
Micro810 USB Adapter 2080-USBADAPTER	Yes	No	No	USB programming access
External Power Supply 2080-PS120-240VAC	Yes	Yes	Yes	optional controller power supply
RS232/485 Isolated Serial Port 2080-SERIALISOL	No	Yes	Yes	• adds additional serial communications with Modbus RTU and ASCII protocols • isolated for increased noise immunity
Digital Input, Output, Relay, and Combination Modules 2080-IQ4, 2080-IQ4OB4, 2080-IQ4OV4, 2080-OB4, 2080-OV4, 2080-OW4I	No	Yes	Yes	• 4-channel inputs/outputs or combination modules • configurable as voltage and current inputs • sink or source output • 4-channel relay outputs
High Speed Counter 2080-MOT-HSC	No	Yes	Yes	• Up to a minimum of 250 KHz differential line driver for improved noise immunity and additional dedicated I/O • One Quadrature (ABZ) differential inputs alternately configurable for pulse internal, pulse with external direction, A-up and B-down input configurations, and quadrature mode • User-configurable minimum and maximum values, preset, and Z operation
DeviceNet Scanner 2080-DNET20	No	Yes	Yes	• Scanner mode – scan devices such as CompactBlock™ LDX, PowerFlex® drives, overloads and sensors
Remote LCD 2080-REMLCD	No	Yes	No	• Operator interface for configuring such settings as IP address on Micro820 controller • With RS232 and USB ports
Non-isolated Unipolar Analog Input/Output 2080-IF2, 2080-IF4, 2080-OF2	No	Yes	Yes	• adds up to 20 embedded analog I/O with 12-bit resolution (with 48-point controllers) • 2 channels for 2080-IF2, 2080-OF2 • 4 channels for 2080-IF4
Non-isolated Thermocouple 2080-TC2	No	Yes	Yes	• for temperature control, when used with PID • 2 channels for 2080-TC2 and 2080-RTD2
Non-isolated RTD 2080-RTD2	No	Yes	Yes	
Memory Module with RTC 2080-MEMBAK-RTC	No	No	Yes	• backup project data and application code • high accuracy real-time clock
6-Channel Trim Potentiometer Analog Input 2080-TRIMPOT6	No	Yes	Yes	adds six analog presets for speed, position and temperature control

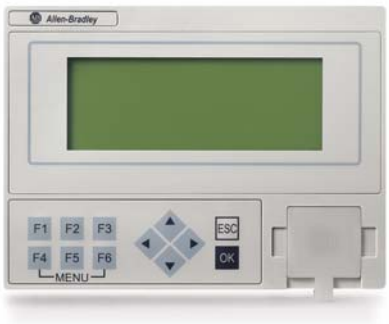
External Power Supply (2080-PS120-240VAC)

Attribute	Value
Dimensions, HxWxD	90 x 45 x 80 mm (3.55 x 1.78 x 3.15 in)
Shipping weight	0.34 kg (0.75 lb)
Supply voltage range(1)	100V…120V AC, 1A 200…240V AC, 0.5A
Supply frequency	47…63 Hz
Supply power	24V DC, 1.6 A
Inrush current, max	24 A @ 132V for 10 ms 40 A @ 263V for 10 ms
Power consumption(2) (Output power)	38.4 W @ 100V AC, 38.4 W @ 240V AC
Power dissipation (Input power)	45.1 W @ 100V AC, 44.0W @ 240V AC
Isolation voltage	250V (continuous), Primary to Secondary: Reinforced Insulation Type Type tested for 60s @ 2300V AC primary to secondary and 1480V AC primary to earth ground.
Output ratings	24V DC, 1.6 A, 38.4 W max.

(1) Any fluctuation in voltage source must be within 85V...264V. Do not connect the adapter to a power source that has fluctuations outside of this range.

(2) When setting up a Micro800 system, verify that total power consumption of the controller, plug-in and expansion I/O does not exceed the output power capacity of the power supply used.

Remote LCD (2080-REMLCD)



Attribute	Value
Dimensions, HxWxD	97 x 130 x 35.5 mm (3.82 x 5.12 x 1.40 in.)
Display type	192 x 64 pixel monochrome
Display size	48 x 106.5 mm (1.89 x 4.19 in.)
Backlight	25000 hrs @ 25 °C LED; tricolor backlight (RGB)
Operator input	Tactile keys (function keys, arrow keys, ESC and OK keys)
Programming port	USB to serial converter for programming the controller
Input supply voltage	12V/24V DC (±10%)
Input supply current, max	90 mA @ 12V and 60 mA @ 24V
Power consumption, max	1.5 W
Weight, approx.	405 g (0.89 lb) – includes packaging weight
Wire size	Single-wire gauge: 0.14…1.5 mm^2 (26…16 AWG) rated @ 90 °C (194 °F) Dual-wire gauge: 0.14…0.75 mm^2 (26…18 AWG) rated @ 90 °C (194 °F)
Wire type	Copper
Wiring category(1)	3 – on power ports; 3 – on communication port
Enclosure type ratings	Meets IP65 (when front panel mounted)
North American temp code	T4

(1) Use this conductor category information.