JZ10-11-T40V — 16 Digital, 2 Analog/Digital, 2 Analog Inputs, 20 Transistor Outputs

Jazz™ Micro-OPLC™ Technical Specifications

Power supply

Input voltage	24VDC
Permissible range	20.4VDC to 28.8VDC with less than 10% ripple
Current Consumption	See Note 1
Max. current consumption	170mA@24VDC
Typical power consumption	3W

Notes:

1. If you do not use the LCD backlight, subtract 35mA from the maximum current consumption value.

Digital Inputs

Number of inputs	18 (two groups) – see Notes 2 & 3
Input type	pnp (source) or npn (sink)
Galvanic isolation	None
Nominal input voltage	24VDC
Input voltage	
pnp (source)	0-5VDC for Logic '0' 17-28.8VDC for Logic '1'
npn (sink)	17-28.8VDC for Logic '0' 0-5VDC for Logic '1'

	I0-I15	I16-I17
Input current	3.7mA@24VDC	1.2mA@24VDC
Response time	10mSec typical	20mSec typical

Input cable length	Up to 100 meters, unshielded
High speed inputs	Specifications below apply when wired as H.S.C. See Note 4.
Resolution	16-bit
Frequency	5kHz maximum
Minimum pulse width	80µs

Notes:

2. Inputs I0-I15 are arranged in a single group. Via wiring, the entire group may be set to either pnp or npn.
3. I16 & I17 may be wired as either digital or analog inputs, as shown in the product's installation guide. I16 & I17 may be wired as npn, pnp, or 0-10V analog inputs. 1 input may be wired as pnp, while the other is wired as analog. If 1 input is wired as npn, the other may **not** be wired as analog.
4. I0 and I1 can each function as either a high-speed counter or as a normal digital input. When used as a normal digital input, normal input specifications apply.

Digital Outputs

Number of outputs	20 pnp (source) (in two groups) – See Note 5
Output type	P-MOSFET (open drain)
Isolation	None
Output current	0.5A maximum per output, total maximum for each group: 4A.
Maximum frequency	50Hz (resistive load)
	0.5Hz (inductive load)
Short circuit protection	Yes
Short circuit indication	Yes, by software
On voltage drop	0.5VDC maximum
Power supply for outputs	
Operating voltage	20.4 to 28.8VDC
Nominal voltage	24VDC

Notes:

    5.   Outputs O0-O11 share a common power signal.
            Outputs O12-O19 share a common power signal.
            All outputs share a common 0V signal.

Analog Inputs

Number of inputs	4, according to wiring as described above in Note 3
	AN0 – AN3
Input range	0-10VDC
Input impedance	20KΩ
Maximum input rating	28.8V
Galvanic isolation	None
Conversion method	Succesive approximation
Resolution (except 4-20mA)	10-bit (0 to 1023)
Resolution (at 4-20mA)	204 to 1023 (820 units)
Conversion time	20mSec, Synchronized to cycle time
Precision	$\pm$ 3%
Status indication	Yes – if an analog input deviates above the permissible range, its value will be 1024.
Input cable length	Up to 30 meters, shielded twisted pair

Display

Type	STN LCD
Illumination backlight	LED, yellow-green, software controlled
	(LCD backlight; enables the display to be viewed in the dark)
Display size	2 lines, 16 characters long
Character size	5x8 matrix, 2.95x5.55mm

Keyboard

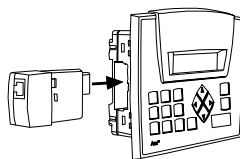|	
Number of keys	16 keys, including 10 user-labeled keys
Key type	Metal dome, sealed membrane switch
Slides	Slides are installed under the operating panel faceplate. They label the keys and provide a logo picture. The unit is supplied with a set of slides already installed. A blank set is available by separate order.

Program	See Note 6
Ladder code memory	24K (virtual)
Execution time	46µSec for bit operations (typical)
Memory bits (coils)	256
Memory integers (registers), 16 bit	256
Timers	64
HMI displays	60 user-designed displays available
HMI variables	64 HMI variables are available to conditionally display text and data. List variables add up to 1.5K's worth of HMI capacity.

Notes:

6. The controller does **not** offer a communication port. In order to download applications, the controller must be installed with an add-on programming port module. Such a module is included in the JZ-PRG programming kit, available by separate purchase.

Jazz Jack

Insertion point	Enables optional add-on modules. See Note 7

Notes:

7. Add-on modules are available by separate order.

Communication	Via add-on port module. See Note 8
GSM-support	SMS messages to/from 6 phone GSM numbers, up to 1K of user-designed messages. Supports Remote Access.
MODBUS	Supports MODBUS protocol, Master-Slave
Baud rate	According to add-on port module

Notes:

8. In order to enable communications, an add-on module containing a COM port must be plugged into the Jazz jack. The module included in the JZ-PRG programming kit may be used to communicate with external devices, if the device provides active RS232 voltage signals for purposes of power supply. For more details, see the JZ-PRG Installation Guide.
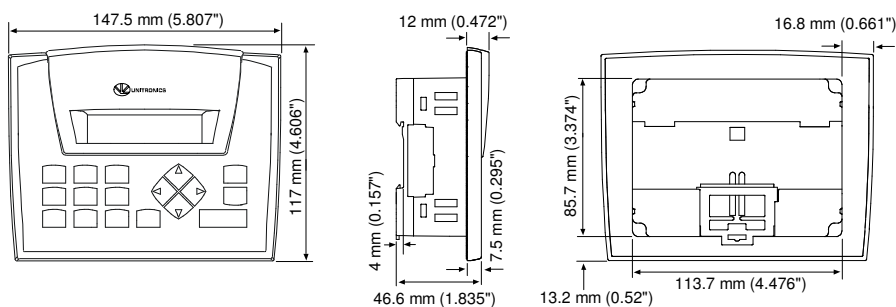
Miscellaneous

Clock (RTC)	Real-time clock functions (date and time).
Battery back-up	10 years typical at 25°C, battery back-up for RTC and system data, including variable data

Environmental

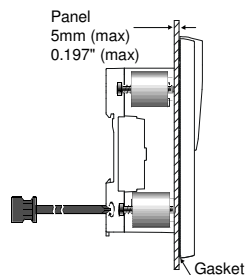| Operating temperature	0° to 50°C (32° to 122°F)
Storage temperature	-20° to 60° C (-4° to 140°F)
Relative humidity (RH)	10% to 95% (non-condensing)
Mounting method	Panel mounted (IP65/NEMA4X)
	DIN-rail mounted (IP20/NEMA1)

Dimensions

147.5 mm (5.807")
117 mm (4.606")

12 mm (0.472")
4 mm (0.157")
7.5 mm (0.295")
46.6 mm (1.835")

16.8 mm (0.661")
85.7 mm (3.374")
13.2 mm (0.52")
113.7 mm (4.476")

Weight   304g (10.72 oz)

Mounting

Panel mounting

Insert into cut-out:
117 x 89mm (WxH)
4.606"x 3.504"

Panel
5mm (max)
0.197" (max)

Gasket

DIN-rail mounting

Snap unit onto the DIN rail

35 mm (1.378")
53 mm (2.087")