PCU 7718

I/NET® Seven

The 7718 Process Control Unit (PCU) is designed to control and monitor HVAC equipment.

It is of similar specification to the PCU7716 but with a lower overall point count.

This controller comes standard with 8 universal inputs and 8 universal outputs.

The 7718 supports expansion cards to increase the point count. (Refer to the part number table for details.)

PCUs reside on the I/NET® Controller LAN and support the local connection of a PC and a modem for standalone or Auto-dial/Auto answer applications.

The controller is supplied mounted on a baseplate for inclusion in a suitable enclosure
The controller requires 24VAC 40VA power supply.

Recommended enclosure: Encl 1813
(Refer to enclosures datasheet)

Recommended power supply: XFMR6
(Refer to transformers datasheet)

Installation guide: TCON106

TECHNICAL DATA

Communication Ports:

Controller LAN
- Baud Rate ..... 9,600 or 19,200 baud
- Protocol ..... Proprietary
- Transport ..... RS 485 SDLC token passing
- Connector ..... 2-part screw terminal

Hand-held Console Port
- Baud Rate ..... 1,200 baud
- Protocol ..... Proprietary
- Transport ..... TTL
- Connector RJ-11

Direct Serial Port
- Baud Rate ..... 1,200 to 9,600 baud
- Protocol ..... Proprietary
- Transport ..... RS 232 - 7801 tap or asynchronous modem

Expansion Serial Port .....
- Baud Rate ..... 1,200 to 9,600 baud
- Protocol ..... Proprietary
- Transport ..... RS 232 synchronous or asynchronous modem, direct or 2-way dial SDLC (78061 or 78035 TAP)

Autodial
- Stored Numbers 8
- Digits per Number 31
- Supports ..... Phone, beeper, pager

Network Wiring Requirements:
- Length ..... 5,000 feet per segment
- Extended Length ..... 25,000 feet with repeaters
- Connector ..... 2-part screw terminal
- Cable Type ..... Belden 9184 or equivalent twisted pair shielded
- Cable Size ..... <22AWG
- Impedance ..... 85 to 150 Ohm
- Capacitance ..... >30pF/ft between conductors
- Capacitance ..... >55pF/ft conductor to shield

Hardware Details:
- Processor ..... Zilog Z181
- EPROM 32KB
- Static RAM 128KB
- Non-Volatile Memory 512Bytes

TECHNICAL DATA

Battery Support ..... Onboard ni-cad, rechargeable, 300 hours
Firmware ..... Downloaded to battery backed RAM
Clock/Calendar ..... Battery-backed

Physical Details:

PCB Dimensions ..... 10"L x 8.6"W x 1.8"D
Baseplate ..... 14.75"L x 9.6"W
RS232 Expansion Board 4.3"L x 3.4"W
Weight ..... 3.2 lbs
Operating Temperature . 32°F to 122°F
Operating Humidity ..... 10-90% RH, Non-condensing
Power Requirements ..... 24Vac, ±10%, 50/60Hz, 40VA (max)

Universal Input Details:

General
Standard Quantity ..... 8 expandable up to 24
Connector ..... 2-part screw terminal
Accuracy ..... ± 0.1% 0-5V
± 0.5% 0-20mA
± 0.2% 0-10V
Resolution ..... 12 Bit (0.024%)
Filtering ..... Averaging (notch) and glitch filters
Transducer power 24Vdc 160mA

Linear Analog Inputs
Analog 0-5Vdc, 0-10Vdc, 0-20mA
LTS80 ..... Predefined curve

Nonlinear Analog Inputs
Points on curve 21
Curve point spacing ..... User-defined interpolation algorithm

Digital Inputs
Contact Excitation ..... 5v @ 5ma

Pulsed Inputs
Pulse Input Rate ..... 4 Hz selectable to 20 Hz
Input Duration ..... 120 msec min

Universal Output Details:

Note: DO and AO points share the same physical terminations on the baseboard and cannot be accessed simultaneously.

General
Standard Quantity ..... 8 (on base) expandable up to 16
Connector ..... 2-part screw terminal

Digital Outputs
Style ..... Current sourcing discrete
Rating ..... 0.25 Amp at 24Vdc
Overrides ..... On/Off/Auto switches onboard
Feedback ..... Tri state feedback
Modes ..... Latched, momentary, pulse width modulation

Analog Outputs
Style ..... Voltage sourcing
Rating ..... 0-10Vdc at 10mA
Overrides ..... On/Off/Auto switches onboard
Feedback ..... Tri state feedback
Accuracy ..... 1% typical, 3% minimum
Resolution ..... 8 Bit
Point Scan Interval ..... 1-255 seconds
DDC Sample Interval ..... 1-255 seconds

Options:

Note: Only one communications card can be fitted to a controller

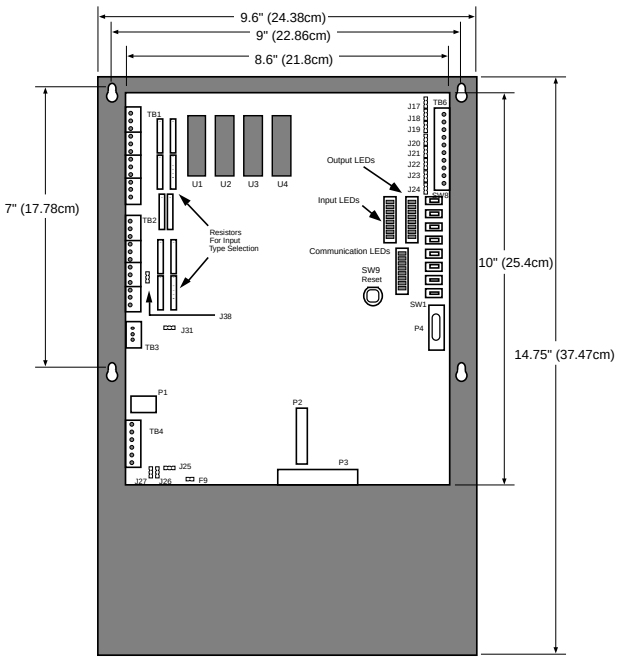
Communications
RS 232 EXP ..... Additional serial connection with synchronous communication capability
RS 232 EXP-C ..... RS 232 EXP with CE certification

LED Details:

LAN TX
LAN RX
RS232TX
RS232RX
Hand-held TX
Hand-held RX
LAN Reconfig
Alarm
Low Power
Outputs Disabled
Each Output On/Off/Auto

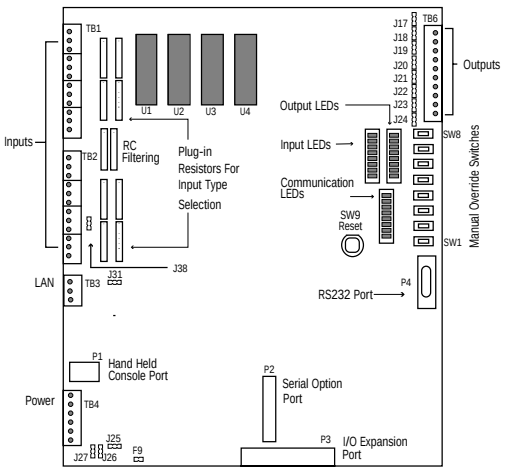
Listings:

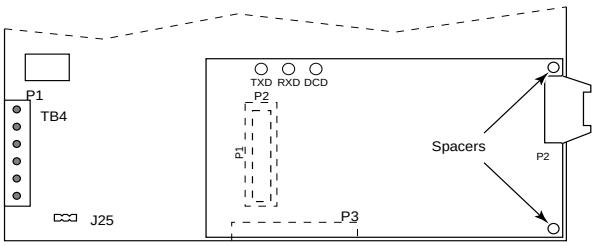
UL916 ..... Energy management mquipment
CE Marking ..... Available
EN61000-4-2 ..... Electro static discharge
EN61000-4-3 ..... Radiated RF
EN61000-4-4 ..... EFT
EN61000-4-5 ..... Surge tested



PART NUMBERS					
		UI	DO	AO 4-20MA	AO 0-10 VDC
BASE	7718 7718-C	8	8	—	—
EXPANSION CARD*	P16UISO P16UISO-C	16	—	—	—
	P8UI8DOSO P8UI8DOSO-C	8	8	—	—

**** Base controller will only support one I/O expansion card.***
Part numbers ending in -C are Ce Marked.





RS 232 Expansion Option

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