

NEMAtrol

Features

- Compatible with all Standard Size "trol", SUPERtrol & 1/8 DIN Products
- Meets NEMA 4X/IP65 Specs.
- Quick-Release Latches
- Light Weight

Application:

Ideal for use in most petro-chemical plants, sewage plants, food processing areas, packing plants, electro-plating plants, etc.

Construction:

- Molded fiberglass reinforced polyester material has excellent chemical resistance and outstanding physical properties.
- Fiberglass material is easily punched, drilled, filed or sawed.
- Oil-resistant gasket attached with oil-resistant adhesive.
- The enclosures have corrosion-resistant fiberglass hinges and spring-loaded fiberglass latches attached with monel screws.

Physical Properties	Enclosure Value	ASTM Method
Flexural Strength	17,000 PSI	D-790
Heat Distortion	400° F	D-648
Water Absorption (24hrs.)	.5%	D-570
Tensile Strength	6,500 PSI	D-651
Specific Gravity	1.8	D-792
Flammability	94-5V	UL94
Dielectric Strength	400 V.P.M	D-149
Arc Resistance	180 Sec.	D-495

Ordering Information

Part Number

NEMAtrol4X (NEMA 4X enclosure for all standard 'trol units
7.365" x 2.495" cutout)

NEMAtrol 4x0 (no cutout)

NEMAtrol 4x1 (1 cutout)

NEMAtrol 4x2 (2 cutouts)

NEMAST4X (NEMA 4X enclosure for SUPERtrol series)

NEMAST 4x1 (1- 5.43" x 2.68" cutout for SUPERtrol series)

NEMAST 4x2 (2- 5.43" x 2.68" cutout for SUPERtrol series)

NEMA-1/8DIN (NEMA 4X enclosure for all 1/8 DIN size units)

NEMA-1/8DIN 4x0 (no cutout)

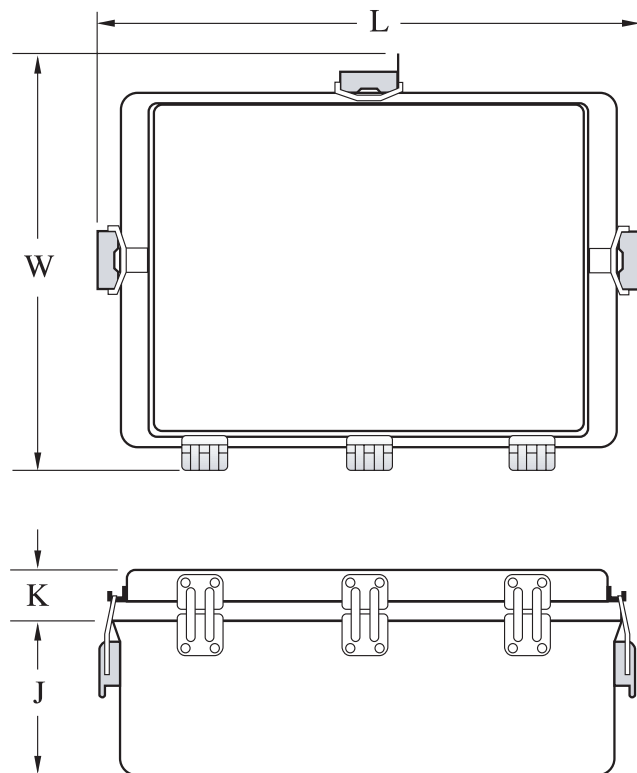
NEMA-1/8DIN 4x1 (1 cutout)

NEMA-1/8DIN 4x2 (2 cutouts)

NEMA 4X/IP65 Enclosures For 'trol & 1/8 DIN Cases



Dimensions:



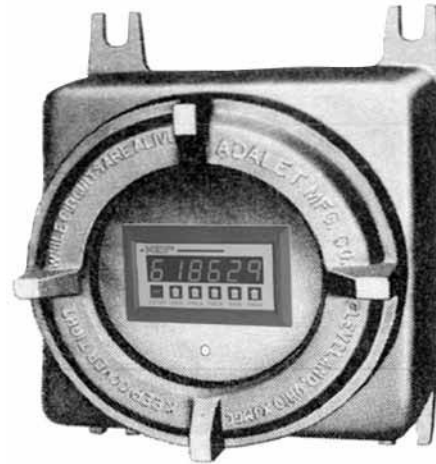
Part Number	W	L	K	J
NEMA-1/8DIN	7.86 (200)	8.97 (228)	1.00 (25)	4.38 (111)
NEMAtrol4X & NEMAST4X	9.86 (250)	12.97 (329)	1.75 (44)	5.13 (130)

XHV Series

X-Proof Housing for Viewing Displays in Hazardous Areas

Features:

- Available for 1/8 DIN and DIN 144 x 72 mm Cases
- Meets NEMA 7 & 4 Specs.
- For use in Class 1, Division 1, Groups C & D
- For use in Class 2 & 3, Division 1, Groups E, F & G
- UL, CSA Approved
- Magnetic Reset Switch Available



Specifications:

This housing is designed and manufactured in compliance with UL Standard No. 886 and CSA Standard C22.2 No. 30-M1986 for use in Class I, Division I, Groups C & D and Class II in III, Division I, Groups E, F & G hazardous locations.

Certified by:

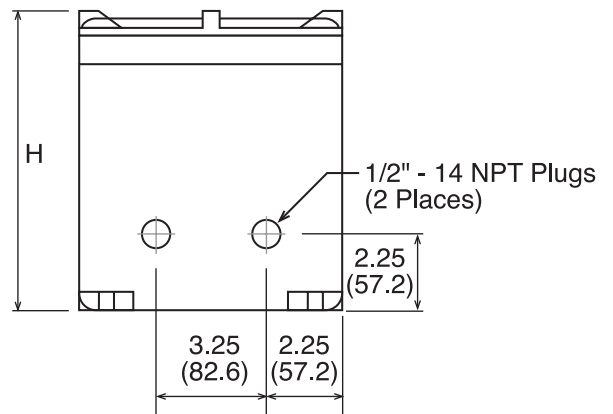
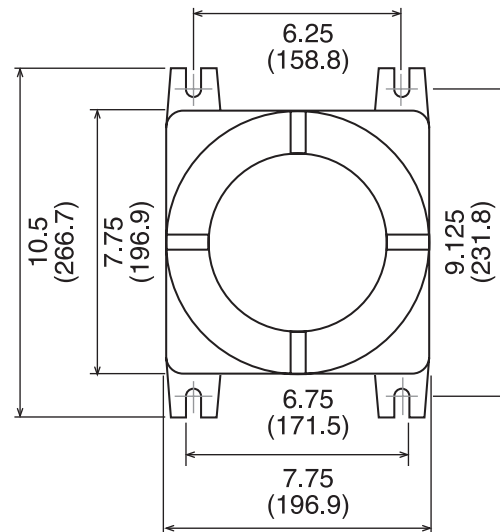
ADALET
UL (file# E81696)
CSA (file # LR27991)

The housing is made from cast aluminum and sealed to meet NEMA 7 and 4 specifications.

Empty weight:

XHV = 19 lbs.
XHVD = 22 lbs.

Dimensions:



H
XHV = 8.5 (215.9)
XHVD = 11.5 (292.1)

Ordering Information

Example: XHV 7/4 A A S1

Series: _____

XHV 7/4 (8.5" high for MRT, MB, etc.)
XHVD 7/4 (11.5" high for Supertrol 1 and 2)

Mounting Sub Panel: _____

A = Panel for (1) 1/8 DIN unit (MRT, etc.)
B = Panel for (2) 1/8 DIN units (MRT, etc.)
C = Panel for (1) DIN 144 x 72mm unit (ST1, ST2)

Assembly: _____

A = Assembled by: Flowmetrics
X = No Assembly

Options: _____

S1 = 1 Magnetic Reset Switch and Magnet
S2 = 2 Magnetic Reset Switches and Magnet

Accessories:

XHVA-1 = Magnetic Switch
XHVA-2 = Actuating Magnet

Note: When placing the order, the unit part number directly following the XHV part number on the Purchase Order is the one that will be assembled into the XHV housing.

XTROL 7/4

Explosion Proof Housing for 'trol Products

Features:

- Compatible with all Standard Size "trol" and "SUPERtrol" Family of Products
- Meets NEMA 7 & 4 Specs.
- For use in Class 1, Division 1, Groups C & D
- For use in Class 2 & 3, Division 1, Groups E, F & G
- FM, CSA Approved
- Specials Available for Custom Conduit Entries
- Empty Weight: 26 lbs.



Specifications:

This housing is designed and manufactured in compliance with UL Standard No. 886 and CSA Standard C22.2 No. 30-M1986 for use in Class I, Division I, Groups C & D and Class II an III, Division I, Groups E, F & G hazardous locations. It is **certified by:**

ADALET

FM (file# JI 0V2A6.AE)

CSA (file # LR36172).

It is made from cast aluminum and sealed to meet NEMA 7 and 4 specifications. This is accomplished by neoprene gaskets retained in machined grooves in the covers and buttons.

The front button actuators have the same easy-to-use keypad layout. 6 blind threaded holes are provided for mounting with 2 each 1/2" NPT openings for wiring.

To install a unit, the 16 front 3/16" allen screws must be removed and the "trol" mounted in the sub panel provided.

If the assembly option is ordered, only the 8 back cap screws need to be removed to complete the wiring to an optional pluggable connector.

XTROL 7/4*

Example: XTROL7/4 BT2 A

Series: XTROL7/4 (housing only)

Mounting Hardware: (Includes labels and two piece connector)

BT2 = BATCHtrol II

KRT = KEPtrol R/T

MFC = Mass Flow Computer

ST1** = SUPERtrol-I (consult factory)

ST2** = SUPERtrol-II (consult factory)

X = No Mounting Hardware

CONTROLLERS SOLD SEPARATELY

Assembly

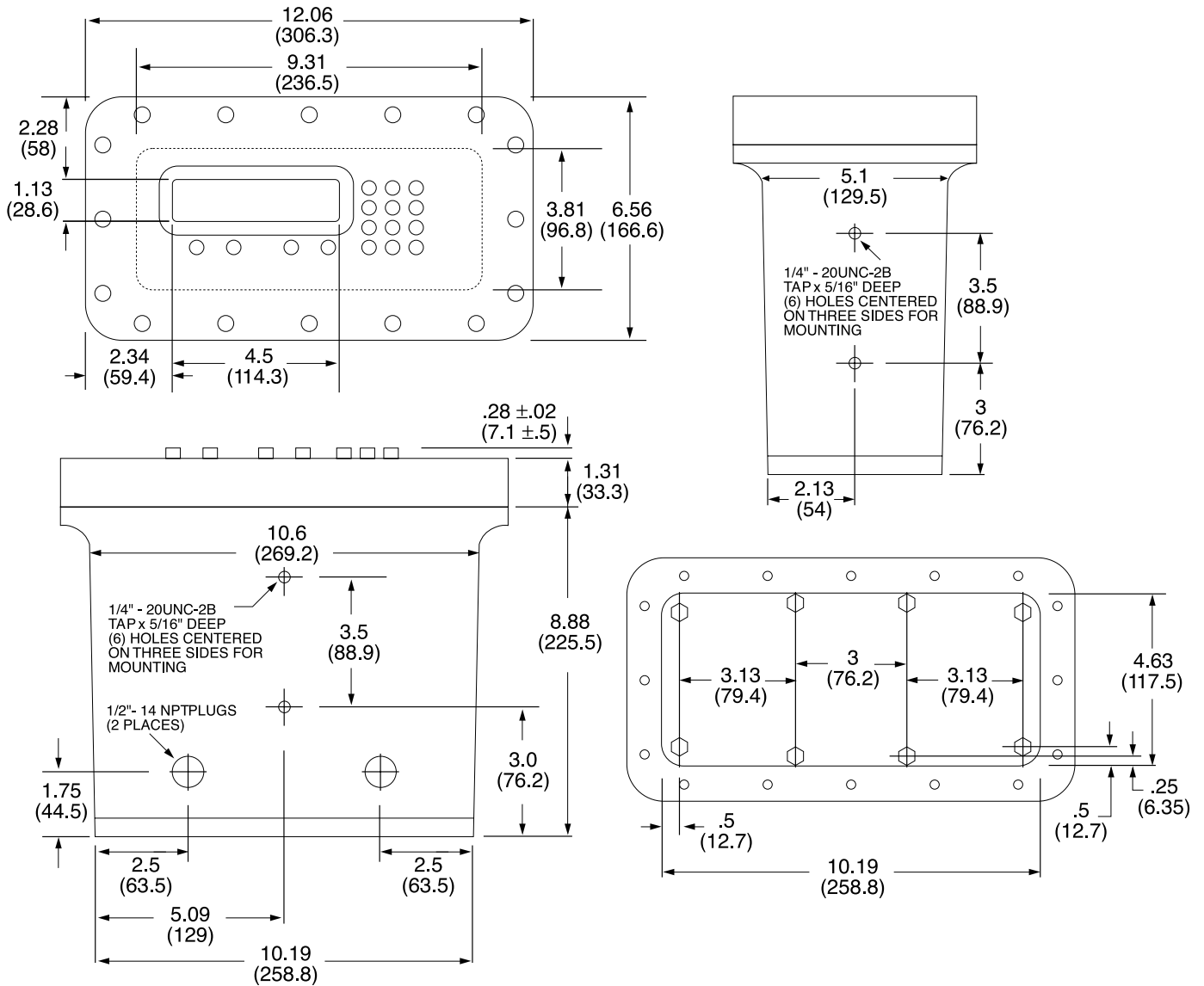
A = Assembled by Flowmetrics

X = No Assembly

Note: When placing the order, the unit part number directly following the XTROL part number on the Purchase Order is the one that will be assembled into the XTROL housing.

** See also XHV series enclosure.

XTROL 7/4 Dimensions:



Assembly:

If HOUSING ONLY is purchased, all front allen screws and front must be removed. Remove four allen screws so that the 'trol product can be mounted in the internal bracket (gasket not used; top of bracket is the thinner side). Wiring should be done before installing 'trol in the housing unless the MOUNTING HARDWARE with two piece connector is purchased. If the unit is assembled by Flowmetrics, only remove the back plate. The pluggable connector can be wired at back.

P1000

Desktop / Handheld Serial Printer

Features

- Dot Matrix Printer
- Uses Standard 2.25" Plain Paper Roll
- 24 or 40 Column Printing
- Standard Epson™ Ribbon
- Internal 2KB Buffer
- RS232 With Selectable Baud Rate

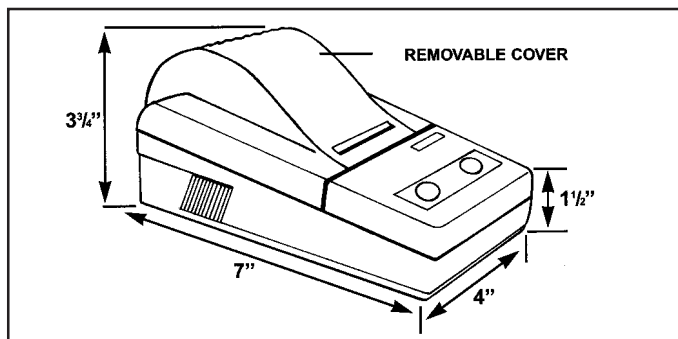
Applications:

- Logging data from Flowmetrics instruments
- Remote messages printing
- Real-time-clock (optional) for time and date stamp
- Plain paper for long lasting record keeping
- Direct recording measurements from digital hand tools or electronic scales.

Description:

The P1000 printer is a top quality impact dot matrix micro printer. It is small, light weight, and low in cost, but extremely powerful in performance. This model is portable and designed for applications where regular desktop printers are unnecessary and space is limited.

Dimensions:



Ordering Information

EXAMPLE	P1000	1	C
Series	P1000 Printer		
Operating Voltage	1 = 110V AC adaptor 2 = 230V AC adaptor		
Options	C = RealTime Clock (not required for ST1, ST2)		
Accessories	P1AR = Ink Ribbon P1AA230 = 230V Adapter P1AA110 = 110V Adapter P1AC25M9MC = 6', Printer cable for ST1 & ST2 P1AC25M9FC = 6', Printer cable for MRT P1AC25M25MS = 6', Printer cable for all 'trolls		



Specifications:

- Character Types:** 448 defined characters include:
96 standard ASCII characters
Math symbols
Printing symbols
Block graphic characters
32 user defined characters
- Print Method:** Impact Dot Matrix
- Character:** Standard characters 5x7 dot matrix
compositions:
Block graphic char. 6x8 dot matrix
User definable char. 6x8 dot matrix
- Dimension:** 7" x 4" x 3.25"
- Baud Rate:** Selectable baud rate & parity setting by key combinations (1200,2400,4800,9600)
- Print Speed:** 40 lines per minute
- Control Commands:** 35 codes, IBM/EPSON
- Input Buffer:** 2k bytes, expandable to 4k
- Interface:** RS232C, 25 pin D-shape type connector
- Power:** 7.5 volt DC input, max. current 750mA with Internal Battery Pack
110V AC/DC to 7.5V DC adapter supplied.
- Paper:** Plain adding machine typepaper roll, internal mounting up to 130'x2.25" size roll
- Ink Ribbon:** Porelon ERC 09 or equivalent
- Options:** 220V AC/DC adapter
RealTime Clock for time and date stamp at command

KEPServer

SUPERtrol Series 32 Bit Device Driver for KEPware's KEPServer

Description

KEPware's 32 bit device driver works in conjunction with KEPware's **DDE/OPC Server** to exchange data between DDE or OPC clients and SUPERtrol devices. Block reads are optimized automatically. Block polling rates are defined by scanning blocks at the rate of the fastest tag scan rate in the block.

Part Number :

KEPS-KEP1-32:KEP RS232 for SUPERtrol 1 and SUPERtrol 2 • 32 Bit OPC/DDE Server, Now with Modem Support

KEPS-MBS32: SUPERtrol with RS-485 & MODBUS RTU Support

Supported Devices

- Multidrop Supported
- SUPERtrol I and SUPERtrol II

Supported Data

KEPware's 32 bit KEP SUPERtrol device driver supports: Process Variables, Totalizers, Error Status, and Action Routines may be read or activated.

Process Variables: Heat, Mass, Corrected Volume, Volume, Temperature, Pressure, Density and similar items as well as Raw Input & Output signals.

Totalizers: Resettable & non-resettable total of: Heat, Mass, Corrected Volume and Volume

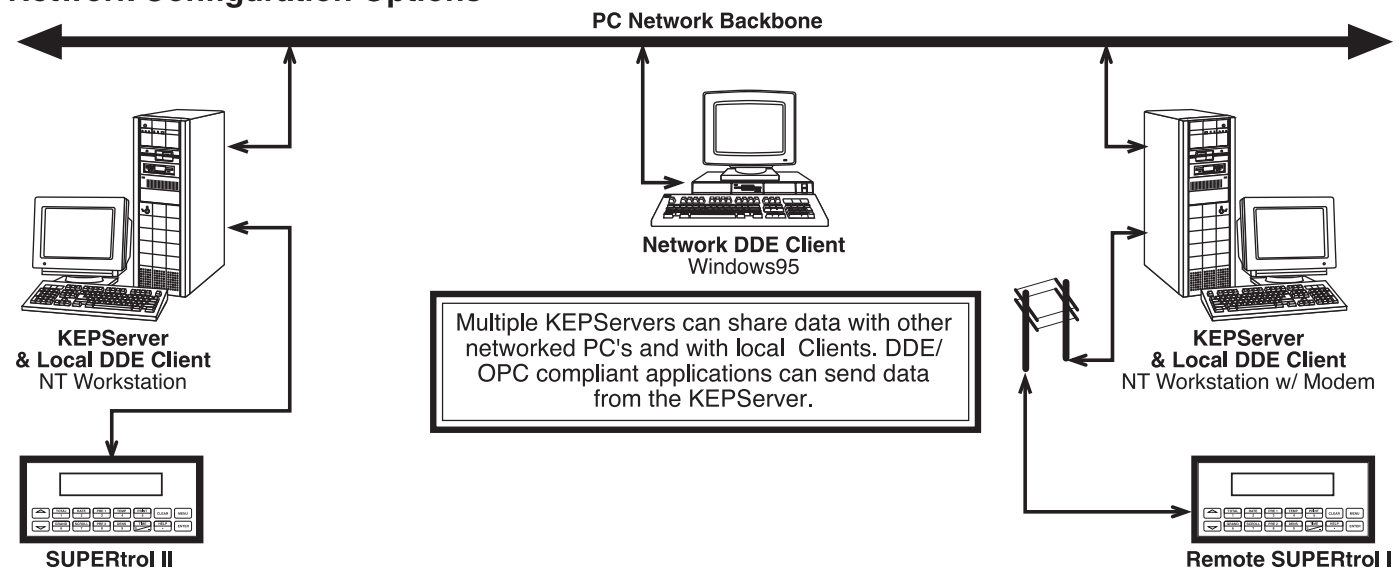
Action Routines: Initiate Print, Clear Totalizer, Clear Alarms, Start Batch, Stop Batch and many others

Data Types: Boolean - bit, Word - unsigned 16 bit, Short - signed 16 bit , Long - signed 32 bit
DWord - unsigned 32 bit, Float - floating point 32 bit, Double - floating point 64 bit,
String - null terminated ASCII

Driver System Requirements

- Windows 95, Windows 98 and Windows NT 3.51 or better with 16MB RAM minimum.

Network Configuration Options



MPP-2400N

Wall Mount Port Powered Modem

Features

- Operates on All Telephone Lines
- RS-232 Powered from SUPERtrol
- 2400 BPS Operation
- Automatic Fallback
- Compatible with All Communications Software
- Automatic Answer
- Tone & Pulse Dialing
- Compact Wall Mount Enclosure
- FCC Approved

Description:

The MPP-2400N Modem is ultra-compact and easy to install. It needs no batteries or AC power because it's designed to run on the DC power provided from the SUPERtrol interface to which it attaches.

The Modem operates at speeds up to 2400 bps. If you are connected to a slower speed modem on the other end of the line, the MPP-2400 automatically "falls back" to match the speed of the slower modem so your data transmission is not interrupted.

The MPP-2400 also features automatic answer, so it can operate unattended.

It will operate over rotary or pushbutton lines since it works in tone or pulse dialing modes.

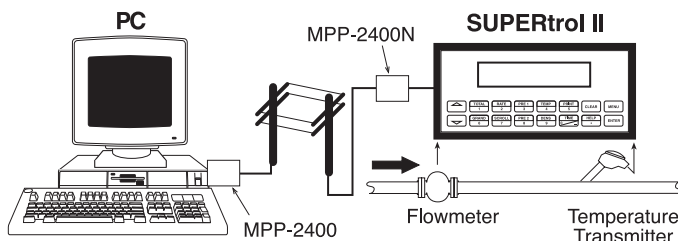
The Modem is very small and simple to install. It offers a standard DB-9 male connector for your RS-232 port connection and an RJ-11 jack for your telephone cabling.

The MPP-2400 complies fully with the Hayes Standard AT Command Set and the ITU V.22 bis and V.22 standards, as well as Bell 103 and Bell 212A protocols.



SPECIFICATIONS:

Operation:	Full- or Half-Duplex
Standards:	ITU V.22, V.22 bis, Bell 103/212A
Interface:	RS-232/V.24
Baud Rate:	2400, 1200, 300 bps
Command Set:	AT compatible
Dialing:	Tone and Pulse
Transmit Level:	-12 dBm
Receive Sensitivity:	-70 dBm
Dropout Level:	-43 dBm
Operating Temp.:	32 to 104 °F (0 to 40 °C)
Storage Temp.:	-40 to 212 °F (-40 to 100 °C)
Humidity:	10 to 95% (non-condensing)
Connectors:	(1) DB-9 male, (1) RJ-11 female
Power:	7-12VDC (RS-232 pins 8 & 9, 75mA)
Size:	3.0"H x 5.1"W x 2.4" D
Weight:	0.5 lb.



Ordering Information

EXAMPLE MPP2400N

Series

MPP-2400N Wall Mount, Port Powered Modem

MPP-2400 Without Enclosure

TWP

Industrial Two Way Pager Wireless Data Transceiver

Features

- Wireless Communications Over ReFLEX Two Way Paging Network
- Compatible with SUPERtrol II Flow Computers
- Request Information From SUPERtrol II on Demand, by Exception or on a Scheduled Basis
- Low Cost Solution for Moderate Message Lengths
- Up to 500 Bytes of Data per Transmission

APPLICATIONS:

Remote Wireless Metering Applications
Fixed Telemetry
Call Out/Call In capabilities to a host system

DESCRIPTION:

The TWP is a two way wireless data transceiver intended for applications where ReFLEX Two-Way Wireless Messaging will be used in remote metering applications using SUPERtrol II flow computers.

The TWP is intended for fixed telemetry applications requiring moderate message length wireless communications.

TWP can initiate a transmission as well as receive and store a transmission. Messages are loaded/sent and received/read using a RS-232 Port and CLP communication linking protocol commands.

USER WIRING TERMINATIONS:

RS-232 Port Pin Assignment

- | | |
|---|----------------|
| 1 | DO NOT USE |
| 2 | RECEIVE (IN) |
| 3 | TRANSMIT (OUT) |
| 4 | DO NOT USE |
| 5 | SIGNAL GROUND |
| 6 | DO NOT USE |
| 7 | RTS |
| 8 | DC POWER - |
| 9 | DC POWER + |

Ordering Information

	TWP	N	W	6ST2
Series	TWP = Two Way Pager			
Enclosure	N = NEMA4X			
Antenna Type	X = None W = Internally mounted Dipole Whip (std) R = Internal Radome with 5' Antenna Cable			
Interconnecting Cable	6ST2 = 6 foot ST2 Cable (other lengths available)			
Accessories	TWP-AMK = Antenna Mounting Kit for Radome Antenna			



- Confirmed Message Delivery
- Check Meter Readings Over Internet or Pager

SPECIFICATIONS:

Antenna:	Internal Dipole antenna Optional External Antenna and Antenna Mounting Kit Accessory (or customer supplied) External Female SMA Connector
Antenna Connection:	External Female SMA Connector
Transmitter Specifications	ReFLEX NBPCS Networks (901-902MHz) 1.75 – 2.0 Watt
Frequency	
RF Power Output at Antenna Port	
Transmit Data Bit Rate	ReFLEX 25 9600 ReFLEX 50 9600
Frequency Stability	1 ppm on transmit
Receiver Specifications	
Frequency	929-942 MHz
Receive Data Bit Rate	6400 bps
Receiver Sensitivity	-115 dBm
Serial Input Connection:	
Connector:	DB9-M
Electrical:	RS-232 with power connection Motorola CLP – Communications Linking Protocol
Protocol:	
Power Consumption:	
Primary Voltage:	7-12 VDC
Standby/Transmit Power:	6 VDV Sealed Battery
Standby Operation	50 mA
Receive	150 mA
Transmit	1.5 A
Battery	Rechargeable battery provided
Reverse Polarity Protected	
Overcurrent Protected	
EMC filtered	
Environmental:	
Enclosure Rating:	NEMA-4X
Dimensions:	3.5" x 4.75" x 8"
Operating Temperature:	0 to +70C
Storage Temperature:	-40 to +85C
Humidity:	0-95% Non Condensing FCC
Approvals:	
Mounting Cautions and Hazards:	Mount antenna in a location where people will not come within 12" during use