PULSAFEEDER SPO

# MicroVision EX Product Introduction

# MicroVision EX

## Models Available for first release

| Model# | Control Parameters | Programmable Timers | Flow Switch | Panel Mounted | Pump mounts | Digital Inputs | USB |
|---|---|---|---|---|---|---|---|
| MVECXXXPX-XXX-XXX | Conductivity control | 3 | No | No | 0 | 5 | YES |
| MVECXXXPF-XXX-XXX | Conductivity control | 3 | Yes | No | 0 | 5 | YES |
| MVECXXXPA-XXX-XXX | Conductivity control | 3 | Yes | Yes | 0 | 5 | YES |
| MVECXXXPD-XXX-XXX | Conductivity control | 3 | Yes | Yes | 1 to3 | 5 | YES |
| MVEC5XXPF-XXX-XXX | Conductivity control | 4 | Yes | No | 0 | 5 | YES |
| MVEC5XXPA-XXX-XXX | Conductivity control | 4 | Yes | Yes | 0 | 5 | YES |
| MVECPXXPF-XXX-XXX | Conductivity and pH | 6 | Yes | No | 0 | 10 | YES |
| MVECPXXPA-XXX-XXX | Conductivity and pH | 6 | Yes | Yes | 0 | 10 | YES |
| MVECPXXPD-XXX-XXX | Conductivity and pH | 6 | Yes | Yes | 1 to 3 | 10 | YES |
| MVECOXXPF-XXX-XXX | Conductivity and ORP | 6 | Yes | No | 0 | 10 | YES |
| MVECOXPA-XXX-XXX | Conductivity and ORP | 6 | Yes | Yes | 0 | 10 | YES |
| MVECOXPD-XXX-XXX | Conductivity and ORP | 6 | Yes | Yes | 1 to 3 | 10 | YES |
| MVECPOXPF-XXX-XXX | Cond.,pH and ORP | 5 | Yes | No | 0 | 10 | YES |
| MVECPOXPA-XXX-XXX | Cond.,pH and ORP | 5 | Yes | Yes | 0 | 10 | YES |
| MVECPOXPD-XXX-XXX | Cond.,pH and ORP | 5 | Yes | Yes | 1 to 3 | 10 | YES |

| Model | Control Parameters | Relays | Timers | Probes | USB | 4-20mA Inputs | 4-20mA Outputs | Digital Inputs |
|---|---|---|---|---|---|---|---|---|
| MVECXXX | Conductivity | 4 | 3 | 1 | √ | 0 to 1 | 0 to 1 | 5 |
| MVEC5XX | Conductivity | 5 | 4 | 1 | √ | 0 to 1 | 0 to 1 | 5 |
| MVECPXX | Conductivity and pH | 8 | 6 | 2 | √ | 0 to 2 | 0 to 4 | 10 |
| MVECOXX | Conductivity and ORP | 8 | 6 | 2 | √ | 0 to 2 | 0 to 4 | 10 |
| MVECPOX | Conductivity, pH and ORP | 8 | 5 | 3 | √ | 0 to 2 | 0 to 4 | 10 |
| MVECPOM | Conductivity, Make-Up, pH and ORP | 8 | 5 | 4 | √ | 0 to 2 | 0 to 4 | 10 |

# MicroVision$^{EX}$

- *Based on MicroVision Simplicity*
- *Merged with advanced technology*
- *Legendary toroidal probe performance*
- *High end control features at affordable value*

*Introducing the MicroVision EX*

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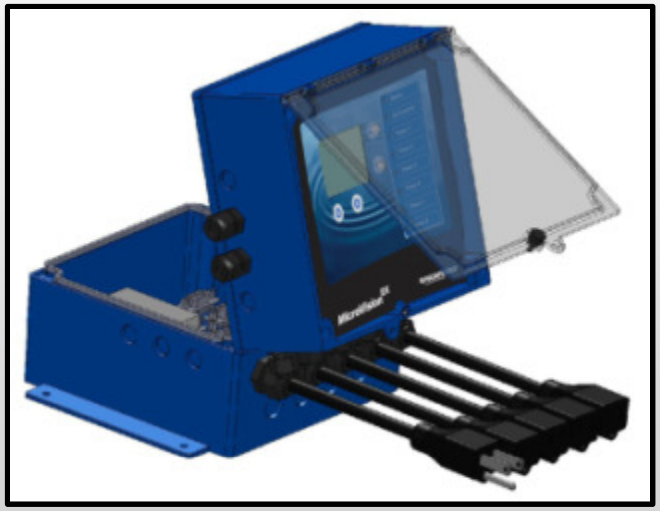
# MicroVision$^{EX}$

- *IP65*
- *Color LCD*
- *Easy Programming*
- *UV Stabilized*
- *Relay Status LEDs*
- *Lockable front window*
- *User defined timer and control name tags.*



- Acid
- Base
- Biocide A
- Biocide B
- Bromine
- Caustic
- Chlorine
- Hypochlorite
- Inhibitor
- Non-Oxidizer
- ORP Control
- Oxidizers
- pH Control
- Timer 4
- Timer 5
- Timer 6
- Timer 7

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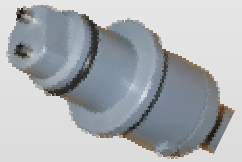
# 4
# Sensor Inputs

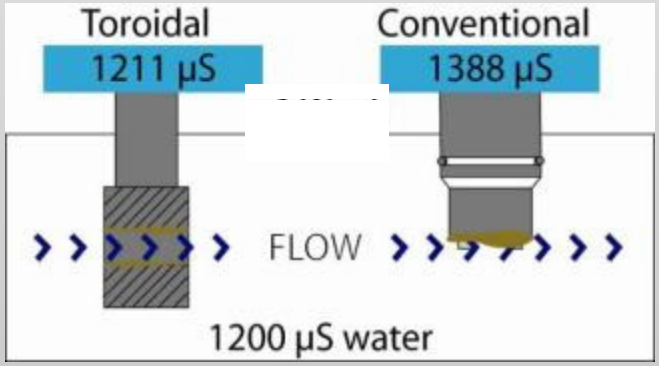
# Probes - Conductivity

- *Conductivity*
- *pH*
- *ORP*
- *Make up conductivity*

# Probes - Conductivity

- *Conductivity*

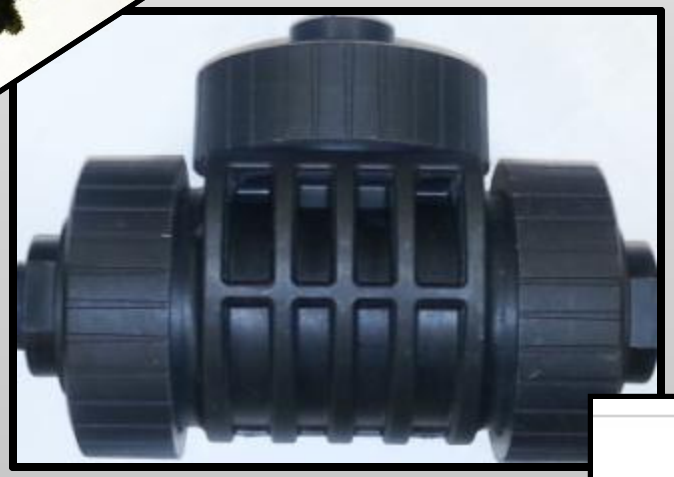


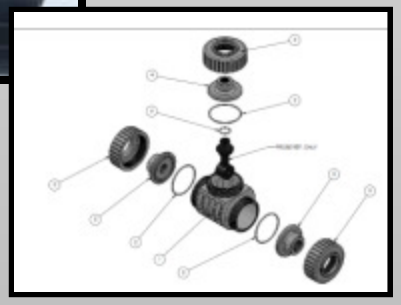



***Maintenance free toroidal probe, doesn't foul like contact style probes***

# Probes - Conductivity

- ***NEW! Easy access probe tee for inspection and easy alignment.***





# Probes – pH and ORP

*pH & ORP probes are standard industrial process sensors.*

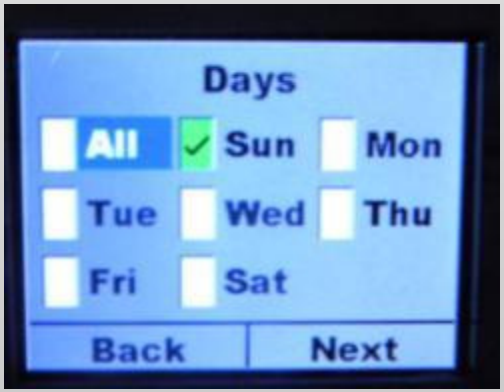
- *1 point calibration*
- *Easy to clean*
- *Easy to change*
- *Digital output for remote installation*

# Relays

# 8
# Relay Outputs

# Relays

- *Conductivity control*
- *pH control*
- *ORP control*
- *Fully programmable timers*
  - Water meter Pulse mode
  - Feed with bleed limit timer
  - Percent mode
  - Percent post bleed mode
  - 28 day biocide calendar timer
  - Alarm output

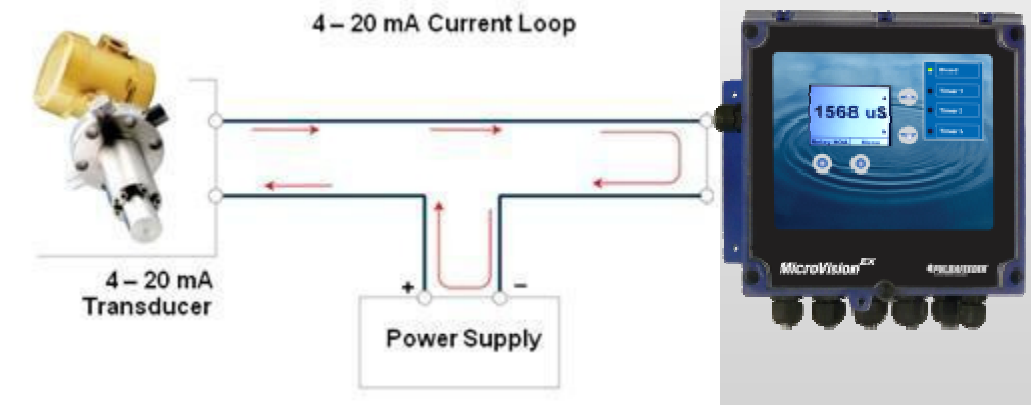


# Digital Inputs

| Digital Inputs | Input 1 | Input 2 | Input 3 | Input 4 | Input 5 | Inputs 6 & 7 | Inputs 8,9 and 10 |
|---|---|---|---|---|---|---|---|
| Function | Flow Switch | Drum Level #1 | Drum Level #2 | Drum Level #3 | Water Meter | Water Meter | Water Meter |
| Assignment | N/A | Timer #1 | Timer #2 | Timer #3 | WM #1 | WM #2 & 3 | WM #4 to #6 |
| Location | P1 | P2 | P3 | P4 | P5 | P6 and P7 | P8, P9, P10 |
| Dry Contact | √ | √ | √ | √ | √ | √ | √ |
| Hall Effect | | | | | √ | | √ |

# 2
# 4-20mA Inputs

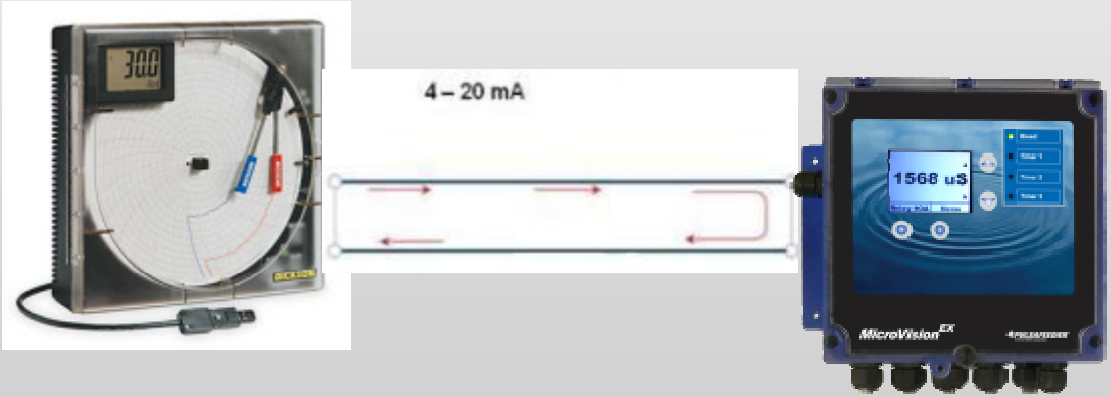
# 4-20mA Inputs




**Up to 2x 4-20mA inputs can be used with sensors to control a relay based on a set point.**

# 4
# 4-20mA Outputs

# 4-20mA Outputs



# Data Logging

Home | Insert | Page Layout | Formulas | Data | Review | View | Developer

N18 | 0

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1 | Company Name: Pulsafeeder | | | | | |
| 2 | Controller Name: MicroVision EX | | | | | |
| 3 | Model Number: CXXXPF-XXXXXX | | | | | |
| 4 | File Creation Data: 20/07/2015 | DMY | | | | |
| 5 | Date | D Fmt | Time | T Per | Cond SetPt | Cond Meas |
| 6 | 6/17/2015 | MDY | 5:04:41 | PM | 1500 | 1108 |
| 7 | 6/17/2015 | MDY | 5:05:50 | PM | 1500 | 1128 |
| 8 | 6/17/2015 | MDY | 5:06:59 | PM | 1500 | 1139 |
| 9 | 6/17/2015 | MDY | 5:08:09 | PM | 1500 | 1143 |
| 10 | 6/17/2015 | MDY | 5:09:18 | PM | 1500 | 1148 |
| 11 | 6/17/2015 | MDY | 5:10:27 | PM | 1500 | 1151 |
| 12 | 6/17/2015 | MDY | 5:11:36 | PM | 1500 | 1153 |
| 13 | 6/17/2015 | MDY | 5:12:46 | PM | 1500 | 1152 |
| 14 | 6/17/2015 | MDY | 5:13:55 | PM | 1500 | 1154 |
| 15 | 6/17/2015 | MDY | 5:15:04 | PM | 1500 | 1150 |
| 16 | 6/17/2015 | MDY | 5:16:14 | PM | 1500 | 1155 |
| 17 | 6/17/2015 | MDY | 5:17:23 | PM | 1500 | 1152 |
| 18 | 6/17/2015 | MDY | 5:18:32 | PM | 1500 | 1155 |

**MicroVision$^{EX}$**

**Data History files**

Data history files include the following:

- Analog input values
  - Conductivity
  - pH
  - ORP
  - Make Up conductivity
  - 4-20mA input #1
  - 4-20mA input #2
- Relay run times and relay status.
- Digital input status
- Historical record of program changes
- Historical record of when the menu is accessed
- Record of timer mode states
- Historical record of alarm conditions
- Historical record of water meter totals
- Power loss and Tamper detection

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# Data Logging

- Export the data as a CSV file
- Use the Pulsafeeder graphing tool to create reports.
  - No Macro required
  - No proprietary software installation required
  - Simply cut and paste the file to your PC.

MicroVision EX

Home | Insert | Page Layout | Formulas | Data | Review | View | Developer

N18 | fx | 0

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
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| 7 | 6/17/2015 | MDY | 5:05:50 | PM | 1500 | 1128 |
| 8 | 6/17/2015 | MDY | 5:06:59 | PM | 1500 | 1139 |
| | 6/17/2015 | MDY | 5:08:09 | PM | 1500 | 1143 |
| | 6/17/2015 | MDY | 5:09:18 | PM | 1500 | 1148 |
| | 6/17/2015 | MDY | 5:10:27 | PM | 1500 | 1151 |
| | 6/17/2015 | MDY | 5:11:36 | PM | 1500 | 1153 |
| | 6/17/2015 | MDY | 5:12:46 | PM | 1500 | 1152 |
| | 6/17/2015 | MDY | 5:13:55 | PM | 1500 | 1154 |
| | 6/17/2015 | MDY | 5:15:04 | PM | 1500 | 1150 |
| | 6/17/2015 | MDY | 5:16:14 | PM | 1500 | 1155 |
| | 6/17/2015 | MDY | 5:17:23 | PM | 1500 | 1152 |
| | 6/17/2015 | MDY | 5:18:32 | PM | 1500 | 1155 |

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# Data Logging -USB

**Download data file**

The controllers data log history file can be downloaded to the USB flash drive for access using Microsoft Excel. Up to 2 years (1 Min/month USB transfer time) of data can be stored at 1 minute intervals based on user defined ranges (30 days, 60, 90,120,180, 1 year, 2 years).

**Download program file**

The controllers programming and set points can be down loaded for duplication of the program on other MicroVision EX controllers.

**Upload program file**

The controllers programming and set points can be uploaded for duplication of the program on other MicroVision EX controllers.

**Firmware Update**

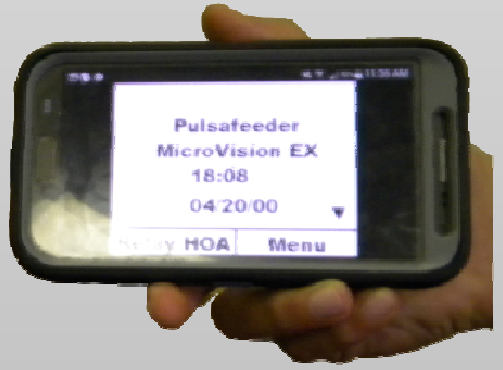
The controllers operating software can be updated in the field to the most current version available from our web site www.Pulsafeeder.com

MicroVision EX

# Data & Communication

**Stay connected**
**to your system.**

- **Ethernet**
- **VNC**

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# Coming fall of 2015