

# Optical Metering in Medical Infusion Pumps



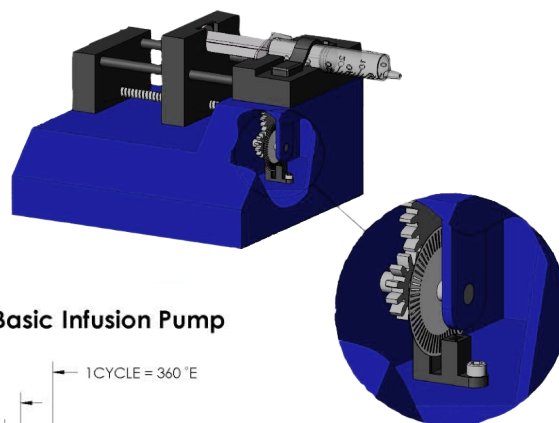
## Application:

Infusion Pumps are used for delivery of small quantities of drugs over long periods of time and for precise delivery of I.V. medication in critical medical care. They administer fluids in ways that would be prohibitively expensive or unreliable if administered manually by the nursing staff. These devices are also commonly called Syringe Pumps.

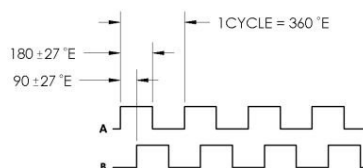


## Requirement:

As a worm gear, or shaft, slowly turns it moves the plunger of a syringe, pushing the medication out. An encoder wheel is driven by a set of gears from the rotating shaft. An optical sensor (encoder) precisely tracks the wheel movement with high precision, and a dual channel version allows the pump to be used in reverse to withdraw fluids.



Basic Infusion Pump



## Solution:

- OPB950 dual channel Photologic™ output for direct TTL interfacing. Includes an integral connector.
- OPB822SD dual-channel phototransistor output for flexibility of electrical design. PCB mountable.



OPB950



OPB822

### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.