



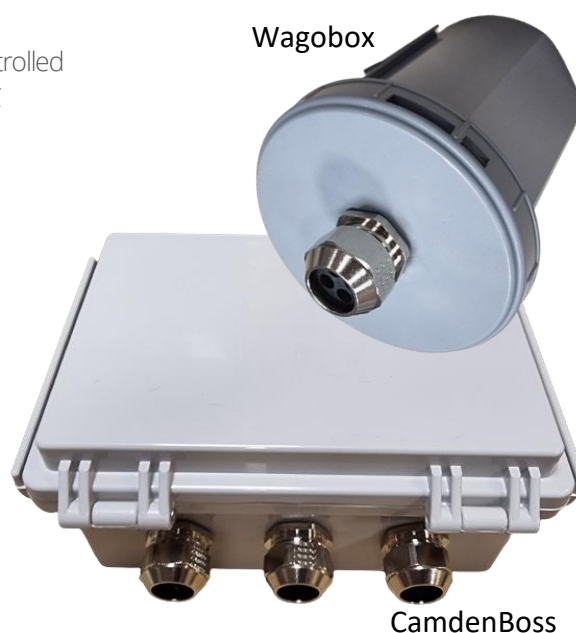
NBLoT IrrigationController

NBLoT IrrigationController was developed for controlling of various latch valves used in smart agricultural projects. This is **battery operated** device – up to 2 LS33600 batteries can be used with total capacity 34Ah to ensure long interval between battery replacement. The device is operated in **NBLoT eDRX mode** which means that during operation it remains semi **on-line** and requests for turning on or off the valves is processed within 40s at latest. This feature is sometimes called paging and the device permanently scans whether the downlink request is present. The power consumption is very low during paging operation and it's **280uAh only** which means that it can survive couple of years with declared batteries – depends also on frequency of requests, number of connected valves etc. Main features of NBLoT Irrigation Controller:

- Up to 8 channels available/8 latch valves can be controlled
- Selectable driving voltage: 6V,9V,12V optional 24VAC
- Interface for pulse counting
- Interface for water meter inductive head
- SDI-12 interface on demand
- SMA antenna/external antenna/helical antenna
- IP67 housing CamdenBoss with multihole glands
- Optional IP68 WagoBox housing
- Configurable scenarios for on/off the valves
- Auto off all valves if communication is lost
- Keep alive, acknowledgement and alarm messages
- Energy saving in PSM mode during off season

Usage

- Irrigation control
- Irrigation optimization



NBLoT IrrigationController	Parameter
Protection	IP67 CamdenBoss box / IP68 Wagobox
Power supply	Up to 2 x 3.6V lithium battery LS33600 (up to 34Ah), optional 24VAC
Power consumption	<280uA in paging/250mA in transmission/150mA in latch valve control
Battery lifetime	5 years with 2 batteries, 4 on/off commands a day, 8 valves
Supported LPWAN standards	NBLoT, eDRX (paging) mode, PSM on demand during off season
Dimensions IP67/IP68	138 x 185 x 85 mm/
Weight incl. 2 x batteries / 1 battery	770g /640g
Outputs	8 individuals – H bridge for latch valve control, selectable voltage 6V, 9V, 12V (other voltage on demand), configurable pulse on/off width, optional up to 8 x 24 AC valve individuals
Inputs	<ul style="list-style-type: none"> • 2 x Pulse counter • 1 x Inductive head for SENSUS or ITRON water meter • 4 x SDI-12 for Truebner SMT100 probes or similar
Antenna	SMA or helical, gain 2.5dBi or external with various gain

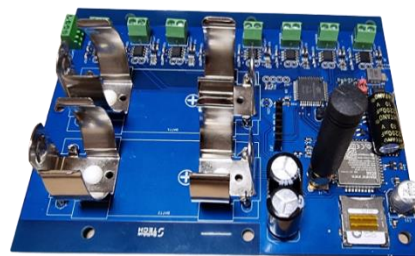
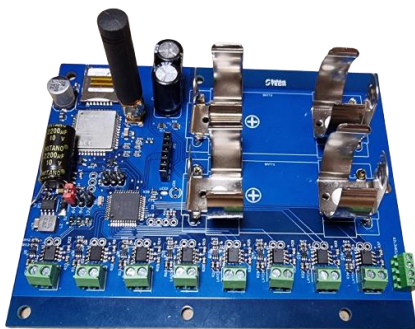




Supported/tested valves manufacturers:

- Galcon
- John Deere
- Rain Bird
- Gardena
- Hunter
- DIG Corporation
- Other supporting 6 to 12V latch pulse

NBLoT Irrigation Controller details IP67 CamdenBoss





NBLoT Irrigation Controller details IP68 Wagobox

