

Control crane and tractor from your smartphone!



Our control system, IF32 - **Second Second** Powerfull, compact but still so simple...

- Everything can be operated from your smartphone.
- Wide selection of professional joysticks for both cab and control unit.
- Handles up to 9 bidirectional functions in one box.
- Connect slave boxes and get 9 extra functions with each box.
- Quick buttons on the joystick for selecting 4x6-function menus.
- Control lights, heater, etc., from the control unit or from your smartphone. With unidirectional functions, the number of outputs doubles.
- Communication via LoRa radio, GSM, or cable.
- Can be connected to 12V and 24V systems.



Slave box

Technical data (preliminary)		
Power	8 – 30VDC	
Max current	45A	
Analog in		
- no.	8ch	
- sensor type, signal	0 - 3.3V/4-20mA/NTC	State when ordering for each inport ch.
- inports, sample frequency	min 1kHz	Application dependent
Outports		
- no.	8st bipolar/16 unipolar	Bipolar/unipoar is configurable.
- outports, type	On off/PWM	configurable
- outports, PWM freq.	5Hz – 5kHz	
- outports, max current	5A	Max tot. current consumption (45A) must not be exceeded.
- outports, voltage	Voltage in -2V	E.g. voltage drop to outports.
External memory	32GB uSD-card	Accessible from front.
Internal memory	128k Flash	Non volatile memory.
Display	LCD 128x64 pix.	With backlight.
Control knob	1 control wheel with 1 push button	
Wired communication		
- speed	>100 kBit/s	
- cable type	Min 4x0.35mm2 twisted pair	Note. Power over bus cable may require thicker leads.
- max. cable length	1 km	Note. Power over bus cable may reduce max distance.
Wireless communication, LoRa (long range ra	dia antion)	
- speed	max 50 kBit/s	
- range	>100m	In open terrain
Wireless comm. GSM		
- wireless communication GSM	GPRS	GSM
Measurements		
LxWxD (mm)	175x80x58mm	External antenna adds aprox. 50mm.
Environmental durability	Fully adapted for	
Deal time alsola	mobile environment.	
Real time clock	aprox 24h	Capacitor powered