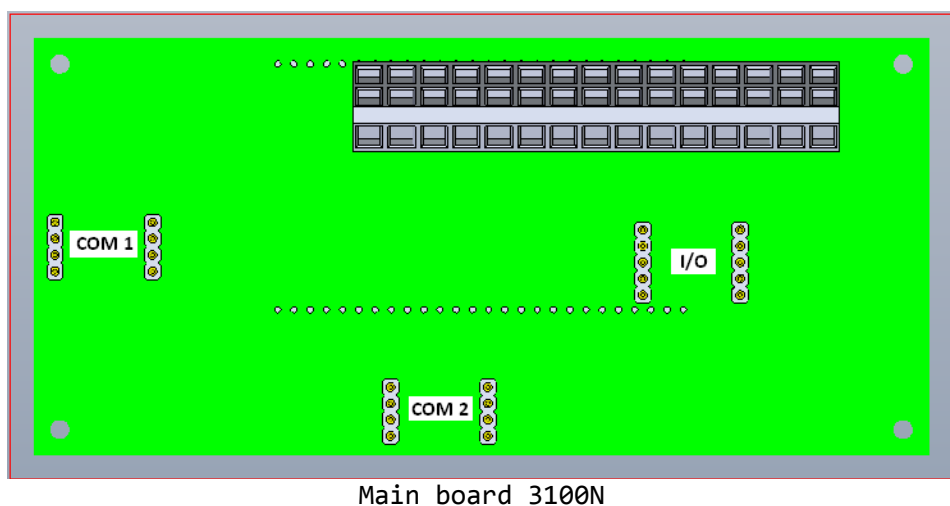


Hardware Options Indicator 3100N

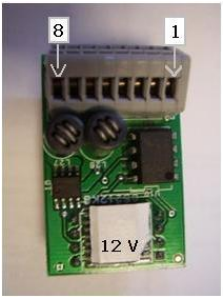
The new 3100N main board has three free sockets:

- COM1
- COM2
- I/O

The positions of the sockets on the main board are as shown in the picture underneath:



The following option boards can be stacked onto these sockets easily:

			
EB-31-N-RS232+PRINTER(6V) RS232 with 6V output printer Position: COM1 and COM2	EB-31-N-RS232+PRINTER(12V) RS232 with 12V output printer Position: COM1 and COM2	EB-31-N-BLUETOOTH Bluetooth class 1 single chip Position: COM2 only	EB-31-N-BLUETOOTH-DUAL Bluetooth class 1 dual chip Position: COM1 only
			
EB-31-N-WIFI WIFI Position: COM2 only	EB-31-N-RCS+ RCS+ with valve output Position: I/O	EB-31-N-RELAY(6V) Relay 6V Position: I/O	EB-31-N-RELAY(12V) Relay 12V Position: I/O

Technical specifications of RCS*plus* Option PCB

Supply:

+12 VDC

Low Bat:

None

Power consumption:

Idle less than 1 mA

Valve Active Valve current

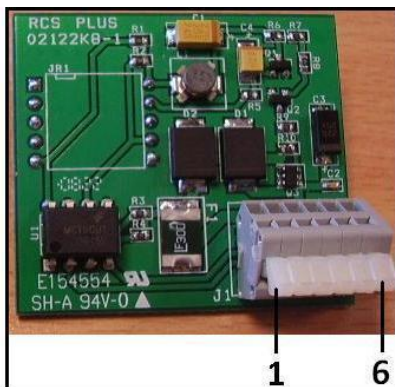
Electronics/Software:

Fuse 3A Thermal fuse

External input 1 functionality activate weighing

External input 2 functionality activate printout

Connection (J1):



1 = connect to Vin- main board

2 = connect to Vin+ main board

3 = connect to coil valve -

4 = connect to coil valve +

5 = external input 1

6 = external input 2

Work temperature:

-10°C to +40°C

Technical specifications Relay Option PCB

Supply:

+6 VDC / +12 VDC

Low Bat:

None

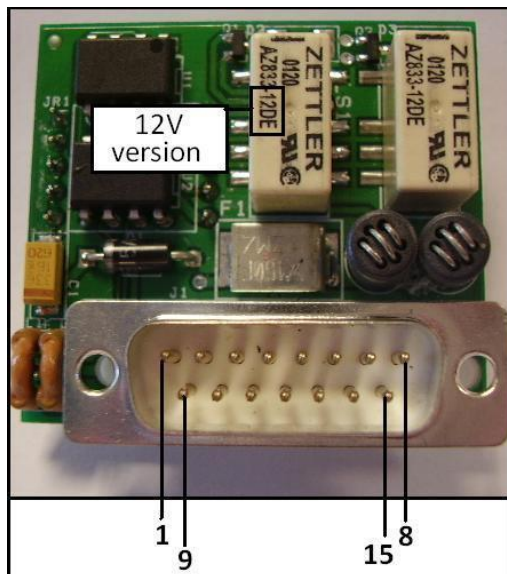
Power consumption:

Idle	less than 1 mA
Input/Output	variable

Electronics/Software:

Fuse	1.5A thermal fuse
External input 1 functionality	activate zero/tare
External input 2 functionality	activate printout

Connector (J1):



- 1 = potential contact relais 1
- 2 = normally open relais 1
- 3 = normally closed relais 1
- 4 = potential contact relais 2
- 5 = normally open relais 2
- 6 = normally closed relais 2
- 7 = external input 1
- 8 = external input 2
- 9 = external supply ground
- 10 = external supply + (max 30VDC)
- 11 = connect to Vin+ main board(12V)
- 12 = connect to Vin- main board (12V)
- 13 = Ground
- 14 = Shield
- 15 = no connection

Work temperature:

-10°C to +40°C

Technical specifications RS232 Option PCB

Supply:

+6 VDC / +12 VDC

Low Bat:

+5.5 VDC / +11.5 VDC

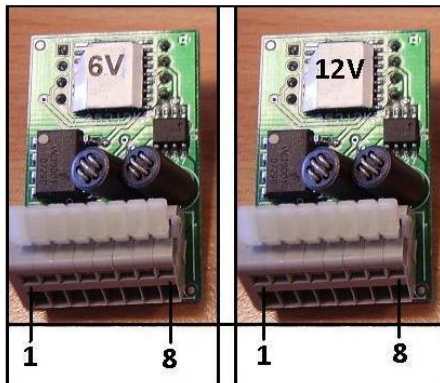
Power consumption:

Idle	2 mA
Print	Printer current

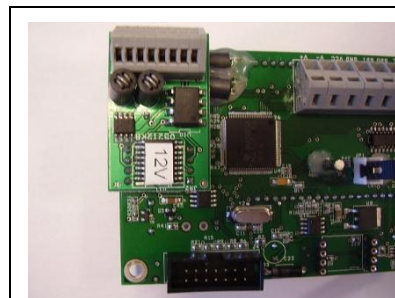
Electronics/Software:

Fuse 1.5A thermal fuse

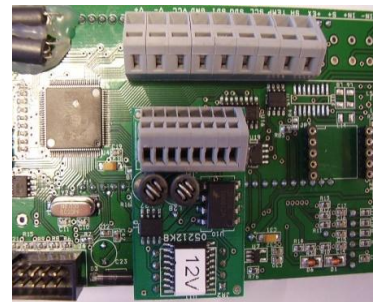
Connector (J6):



- | | |
|--------------------------------------|--------------|
| 1 = Receive Data | (RX-input) |
| 2 = Transmit data | (TX-output) |
| 3 = Ground | (GND) |
| 4 = Ready to Send | (RTS-output) |
| 5 = Clear to send | (CTS-input) |
| 6 = Connect to Vin+ Mainboard | |
| 7 = Connect to Vin- Mainboard | |
| 8 = Switched power supply to printer | |



Stack position RS232 com 1



Stack position RS232 com 2

Serial interface:

Through COM 1 or COM 2

Work temperature:

-10°C to +40°C

Technical specifications WIFI Option PCB

Supply:

From main PCB power input

Low Bat:

Main PCB low battery

Power consumption:

connected waiting	135 mA (6V)/ 68mA (12V)
connected data transfer	170 mA (6V) / 75mA (12V)
not connected, seeking	285 mA ((6V) / 145mA (12V)

Wireless specifications:

Frequency Range	2.400-2.484 GHz
Transmission Range	100 meter (indoors)
Standard	IEEE 802.11 b/g
Security	WEP 64/128, WPA, WPA2/802.11i

Electronics/Software:

Default network settings	DHCP
Default network name	RAVAS
port number	10001
Security setting	none

LED condition	Blinking status	Remark
Off	NA	Power off
Blinking	2x per second	Connected
Off (32 seconds)/blinking	7x per second	No connection

Serial interface:

Through COM 2

Work temperature:

-20°C to +50°C

Technical specifications Bluetooth single Option PCB

Supply:

+3.3 VDC through connector COM 2

Low Bat:

None

Power consumption:

Idle (no send/receive)	3 mA
Max	26 mA

Bluetooth spec:

Class	1
Standard	Bluetooth 2.0
Range	250 meters in free space

Electronics/Software:

None

Serial interface:

Through COM 2

Work temperature:

-20°C to +50°C

Technical specifications Bluetooth dual Option PCB

Supply:

+3.3 VDC through connector COM 1

Low Bat:

None

Power consumption:

Idle (no send/receive)	6 mA
Max	52 mA

Bluetooth spec:

Class	1
Standard	Bluetooth 2.0
Range	250 meters in free space

Electronics/Software:

None

Serial interface:

Through COM 1

Work temperature:

-20°C to +50°C

List of all electronic parts and options 3100N

Article number	Description
IN-31-N	Indicator 3100N Main Board
IN-31-N-noAD	Indicator 3100N Main Board no AD*
EB-31-N-WIFI	WIFI Option Board 3100N
EB-31-N-RCS+	RCS+ Option Board 3100N
EB-31-N-RELAY	Relay Option Board 3100N
EB-31-N-BLUETOOTH	Bluetooth Option Board 3100N (BLT output)
EB-31-N-BLUETOOTH-DUAL	Bluetooth Dual Option Board 3100N (master)
EB-31-N-BLUETOOTH-FORK	Bluetooth Fork Board 3100N*
EB-31-N-RS232+PRINTER	RS232+Printer Option Board 3100N

*: only valid for iFork systems.