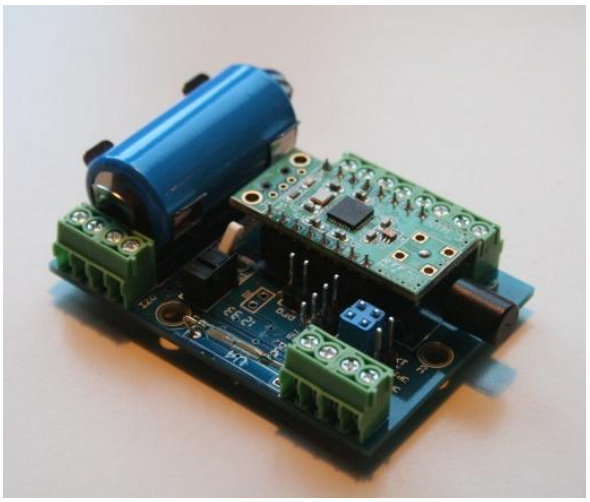
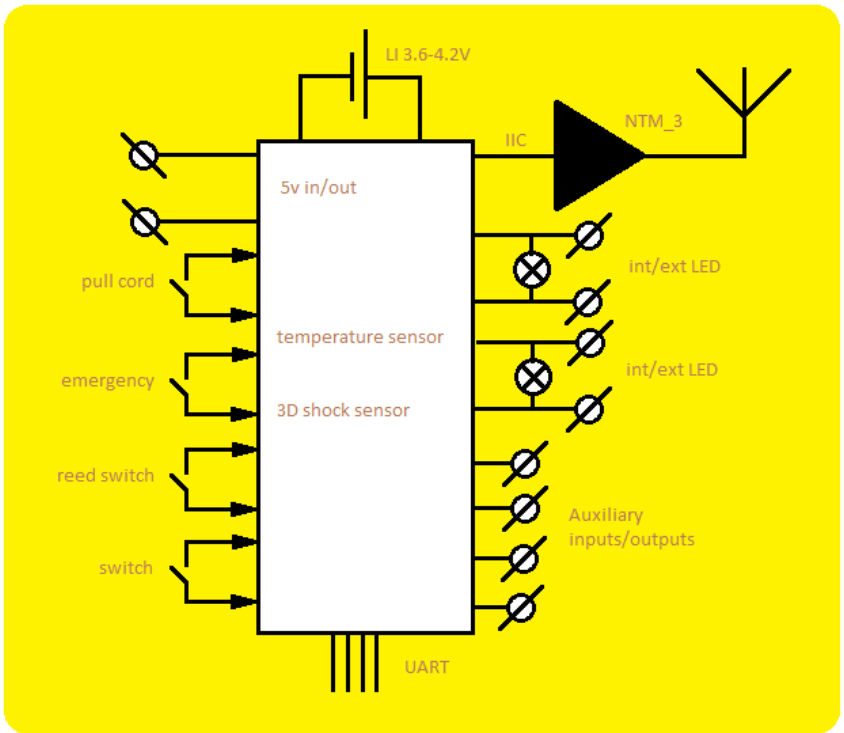
DATA SHEET

NURSE CALL BINARY STATION

NCB		
	Article number:	SPI+NCB_1
	Size:	60 x 42 x 18 mm
	Function:	Interface between on/off inputs and/or outputs and the Ninthway radio network
	Standards:	EN300-220-1 EN300-220-2 EN300-220-3 IEEE 802.15.4 EN54-25 IIC
Specifications		
Functional diagram		

NURSE CALL BINARY STATION

NCB	
Description	The NCB_1 is designed as a multipurpose warn station. It uses an 8 channel I2C extender of which four channels are dedicated as switch inputs and four are available as inputs or outputs to be configured at will. Two input switches are already built in. It has two open collector outputs for indicators. Either the built in LED's can be used or external ones. Change of one or more inputs, triggers the NCB, depending on the set flavour, to set the indicators and transmit a frame with a two bytes payload. - Byte 0 contains the code for the flavour - Byte 1 contains the status of the extender inputs The NCB comes with a number of pre settable operation modes called flavours that couple the input signals to the indicators. Flavour: 1. Offuse — simple I/O device 2. Door — door/window contact 3. Indicator — wireless side indictor 4. Alarm — two button warning station 5. Nsalarm — two button warning station 6. Triple pull — pull cord warning station 7. External — use of external IIC device 8. Syncalarm — synchronized two button warning station to be used with wireless Indicator
Connections	Built in pull cord switch on channel 0 Built in reed switch in channel 2 2 terminals for external emergency button 2 terminals for extra external button 2 terminals for input or output of 5V power supply 2 terminals for external I2C bus 2 sets of 2 terminals for external indicators 4 terminals for auxiliary inputs/outputs 4 UART pins, gnd, 5V, rxd, txd
Jumpers	J1: choice internal external indicator 1 J2: choice internal external indicator 2 J13: prg, to set the NTM in wired programming mode. When removed programming is only possible via remote programming
Parameters	See application note 5; Manual for the nurse call binary station
Indicators	LD1 Green LED

NURSE CALL BINARY STATION

NCB	
	LD2 Red LED
Power supply and current consumption	Battery clip for CR123 battery Supply voltage 2.5 – 5 V Input/output power terminal: 5V Reverse polarity protected
NTM mode	The NCB mode is activated using function 7
Mounting instructions	For the best performance of the radio transceiver mount the PCB with the antenna upright when possible
Additional information	Datasheet NTM_3 Application note 1; Programming the NTM Application note 2; Ninthway high secure radio network Application note 5; Manual for the nurse call binary station