# NOX CMU • N232-G3

NOX CMU (rev. F)

Universal Wiegand interface card reader module, with optional bit format and memory.

NOX CMU specifikations
• Freely programmable card format, and fits one card reader.
• Up to 204 issued cards remain functional, even in the event that communication to the NOX control panel is interrupted.
• The 204 card slots can be defined as cyclic, fixed (offline) or a combination of both.
• Bus interface of 26-80 bit Wiegand, up to 150 meters between reader and interface.
• - One freely programmable relay output (30VDC / 1A).   - One free programmable open collector output.
• - One monitored programmable input.   - Two open collectors, can be set separately for input / output.
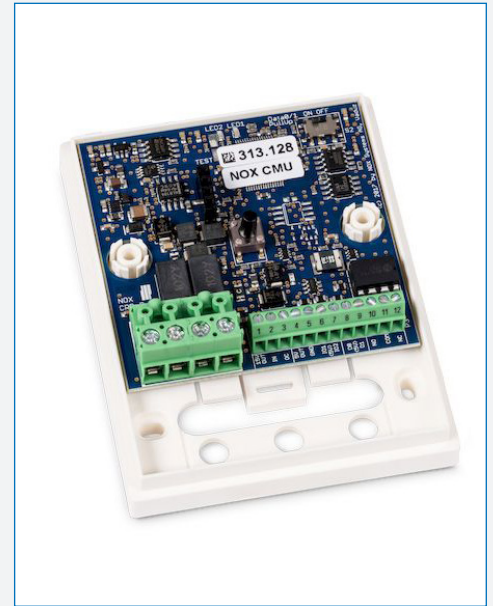
Technical data				
	Unit	Min.	Nominal	Max.
Supply voltage	VDC	8	15.0	16
Current consumption @ 15 VDC	mA	12		18
Operating Tempreature range	°C	0	25	40
Air humidity @40°C (Non-condensing)	% RH			93
Input resistance, Absolute Max rating	kΩ	2		300
Input resistance, recommended range	kΩ	3.5	12	50
VBUS Output (Pin 1) @ 20°C	mA			200
5 VDC Output (Pin 4) 5 sec. pulse	mA			150
5 VDC Output (Pin 4) @ 15VDC	mA			30
5 VDC Output (Pin 4) @ 10VDC	mA			70
Relay		max. 30VDC / 1A		
Open collector output (Pin 3)		max. 25 VDC / 500 mA		
TTL Outputs (Pin 6 og 7)		5 VDC / 20mA each		
Measurements - cabinet (L x W x H)	mm	85 x 66 x 27		
Protection class according to IEC 60529		IP20		
Offline mode - relay reaction time	ms	2		400
Card memory		Op til 204 kortkoder (80 bits)		
Wiegand bit length	µs	20		300
Cable length for inputs/outputs on terminal P3	m			30[1]
Cable length for card readers Data 0 / Data 1	m			30[2]

[1] [2] NOX systems guarantee up to 30 meters

ARAS
SECURITY

NOX CMU • N232-G3

Features

In offline mode (no connection to NOX central) the device operates in stand-alone mode, which allows you to open the door through the integrated relays using a stored card.

The unit offers a resistance monitored input, a relay output, an Open Collector output and two configurable I / O.

On the Wiegand interface you can read up to 80 Wiegand bits. They are processed in the NOX central unit and allow very flexible programming (via NoxConfig) to generate short codes.

Keyboards on card readers are also supported.

With Jumper P4 you can set 4.7kΩ pullup resistors for Wiegand data 0 / Data 1 lines.
If TTL I/O is configured as an input, a 4.7kΩ pullup is automatically applied to this input.

Pin 6 and Pin 7 can be configured via NoxConfig as input or output.

Terminal Assignment					
Terminal P2	**+**	**-**	**A**	**B**	
Pin	8 - 16 VDC	GND	Bus A	Bus B	
Description	Supply voltage (VBUS)		NOX Bus connection		

Terminal P3	1	2	3	4	5	6
Pin	8- 16 VDC	Input	O.C. Output	5 VDC	GND	TTL 1 I/O
Description	VBUS			Power		TTL I/O's
	7	8	9	10	11	12
Pin	TTL 2 I/O	Data 0	Data 1	N.O.	Common	N.C.
Description	TTL I/O's	Wiegand		Relay		

NOTE
If an inductive load is connected to the relay, a "freewheel" diode in anti-parallel (ie in the opposite direction of the relay terminals used) must be connected!
If the diode is used in the forward direction, it is destroyed on first use and the protective effect of the relay contacts against contact combustion disappears!
\ \ The diode must have at least the following data: If ≥ 1A, Ublock ≥ 60V (eg 1N4007).