

cVEND extension boards

## Vending Extension Board I

- Extension module to plug onto cVEND plug
- Tailored for Vending Applications
- Extends cVEND plug with the following interfaces
  - MDB vending machine interface
  - Digital inputs / outputs
  - SAM slot for age verification (girocard only)
  - Connection for external cellular modem



With the cVEND extension boards, the contactless payment system cVEND plug can be expanded for a wide range of applications.

The extension boards are mechanically and electronically tailored to cVEND plug and can simply be plugged onto the extension plugs of the terminal.

Usage of the Vending Extension Board in combination with the cVEND plug is possible with or without the cVEND module housing.

In addition to an MDB slave interface, the vending extension board offers digital inputs/outputs that can be used by software for different applications.

USB host interfaces are also available for maintenance purposes and for high-performance communication with an external cellular modem.

The modular concept with an external modem allows the optional use of existing communication connections and flexible adaptation to changing mobile radio standards. A SAM slot (ID000 format) allows the implementation of applications with security modules.

Due to the wide voltage range (8 to 42 V DC), a waterrepellent coating and the wide temperature range, the cVEND Vending Extension Board is suitable for almost all vending applications indoors and outdoors.

The vending extension board also provides the basis for numerous software functions (depending on the payment application), from a flexible fixed amount system with relay control to a configurable coin checker emulation that also allows vending machines without an MDB connection to be expanded with a modern cashless payment system.

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Extension board for cVEND plug



Technical Data		Conformity to standards		
Housing	Electronics module without housing	Environment	RoHS 2011/65/EU RE 2014/43/EU	
Dimensions (W x H x	D))			
module	74 mm x 65 mm x 22.5 mm	Accessories		
incl. cVEND plug	79 mm x 70 mm x 40.0 mm			
	79 mm x 70 mm x 52.0 mm (incl. MDB connector)	External modem	The Vending Extension Board enables the direct connection of a separate, external cellular	
Environmental conditions			modems.	
Operation	-30 °C to +70 °C		Software support for controlling the modems	
Storage	-30 °C to +80 °C		is integrated into the cVEND application	
Humidity	5 % to 95 % condensing		(GerPayApp version 2.0.5 and above).	
	moisture resistant coating			
Power Supply			The software supports the Telic modems Telic GT910 G	
Voltage	8 to 42 V DC		Telic LT910 E	
Connector	MDB			
	5 Volt DC connectior from cVEND plug		A cableset is available to connect the modems	
	not longer accessible with the extension		to the extension board.	
	board attached			
User interface	Additional interfaces on Vending Extension	Ordering Information		
	Board:			
	1 x LED (Status of digital output)	cVEND EXT.VEND	Order number 5486.000.00	
	1 x Service button (configurable)	Vending Extension	Board I	
		cVEND KM.A	Order number 5157.000.00	
SAM Interface	1 x SAM Sockets ID000 (SIM-Card) format,		Modem (GT910-G oder LT910-E)	
	ISO/IEC 7816 TO / T1 protocol			
	Voltage classes A, B, C, up to 9.6 MHz			
	Card Clock and 600 kbit/s			
Peripheral Interface	Additional interfaces on Vending Extension Board: 1 x MDB Slave 1 x USB 2.0 Host (USB-C plug) 1 x Connector with USB 2.0 Host & 12 V DC for cellular modem			
Online Connection	cVEND plug: Ethernet, IP über USB Extension board: External cellular modem			
Digital I/Os	Additional interfaces on the Vending Extension Board: 2 x digital output (open collector, max 300 mA, max 42 V, short-circuit proof) 2 x digital input (0 V to 24 V input voltage or potential-free)			

