DIGIWGD

Wiegand interface for BPT MIFARE reader of the Digitha entry panel

User's guide

techfass®

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1 Content

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2 Product Description

The *DIGIWGD* interface modules (*fig. 1*) are designed for integrating *MIFARE Digitha readers* embedded in *Digitha* entry panels of *BPT* audio and video systems in 3rd party's access control systems.

The *DIGIWGD* modules are used for seamless integration of the *MIFARE Digitha readers* using standard *Wiegand* protocol. The module is field-configurable to provide various Wiegand output formats of MIFARE® ID media based on the CSN (card serial number).

The module is designed for installation in the *Digitha* entry panel, where it occupies free space near the system reader connector. The module can be inserted very simply.

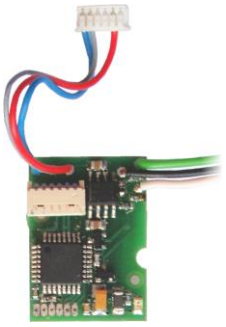

Fig. 1: DIGIWGD

3 Technical parameters

3.1 Product version

Product version	Product designation	Catalogue number	Wiegand output format						
			32 bit (default)	32 bit reverse	26 bit	34 bit	40 bit	37 bit	56 bit
	DIGIWGD	51320000	✓	✓	✓	✓	✓	✓	✓
	Designation of configuration cards [1)]		0	1	2	3	4	5	6

Table 1: Product version

[1)] Configuration cards are available for special order.

3.2 Technical features

Technical features	Supply voltage		18 VDC and 3.3 VDC from BPT electronics
	Current demand	Typical	5 mA (3.3 V); 3 mA (18 V)
		Maximal	10 mA (3.3 V); 10 mA (18 V)
	ID technology (CSN)		MIFARE, MIFARE Plus
	Signalization		1x LED
	Communication interface		I^2C
	WIEGAND data output (configurable [1)])		26-bit, 32-bit (MSB), 32-bit (LSB), 34-bit, 37-bit, 40-bit or 56-bit

Table 2: Technical features

3.3 Special accessories

Special accessories	Card 0	51550120	Configuration card MIFARE, 32 bit (standard)
	Card 1	51550121	Configuration card MIFARE, 32 bit reverse
	Card 2	51550122	Configuration card MIFARE, 26 bit
	Card 3	51550123	Configuration card MIFARE, 34 bit
	Card 4	51550124	Configuration card MIFARE, 40 bit
	Card 5	51550125	Configuration card MIFARE, 37 bit
	Card 6	51550126	Configuration card MIFARE, 56 bit

Table 3: Special accessories

3.4 Mechanical design

Mechanical design	Weight	0.010 kg
	Operating temperature	-25 ÷ 60 °C
	Humidity	Max. 95%, non-condensing
	Housing	IP 54 (built in the entry panel)
	Cable length	0.4 m
	Dimensions	19.2 x 27.0 mm

Table 4: Mechanical design

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4 Installation

4.1 Module description

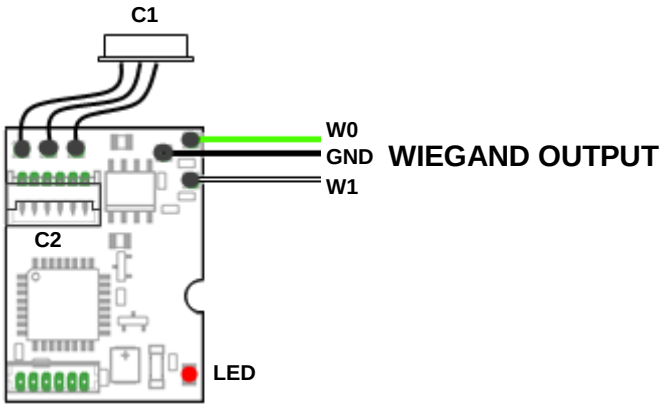

Fig. 2: DIGIWGD interface

	Designation	Purpose
Connectors	C1	Power cable connector for connection to Digitha panel PCB
	C2	Connector for connection BPT MIFARE reader (I^2C interface)
	LED	Signaling LED

Table 5: Connectors and LED indicator description

	Designation	Color	Purpose
Wiring	W0	Green	Wiegand data 0
	GND	Black	0 V
	W1	White	Wiegand data 1

Table 6: Wires

4.2 Mounting and removal the module

4.2.1 Module mounting

When mounting the module it is necessary to remove the screws inserted in the front metal part of the *Digitha* entry panel (*Fig. 3a*). Turn the panel over and unscrew both cross-screws holding the plastic cover of the terminals (*Fig. 3b*). Use proper spanner to unscrew all twelve female screws holding the front and rear parts of the entry panel together (*Fig. 3c*), turn the panel over and carefully uncover the front part of the panel. Disconnect the cable of the reader PCB from BPT electronics and insert it to the *C2* connector of the module. Connect the module cable connector *C1* to the original position of the BPT reader and insert the module to designated free space (*Fig. 3d*). Lead the *Wiegand output* cable along the right wall of the box towards the opening in the upper part and further on out of the panel as shown in picture (*Fig. 3d*). Cover the front part of the entry panel back, turn the panel over and use proper spanner to screw all twelve female screws for holding the front and rear parts of the panel back again (*Fig. 3e*). At last place the plastic cover of the entry panel terminals back (*fig. 3f*) and screw it with the cross-screws (*fig. 3a*).

4.2.2 Module removal

When removing the module use the procedure described in the previous chapter. Do not forget to unplug both entry panel and the module from power supply first!

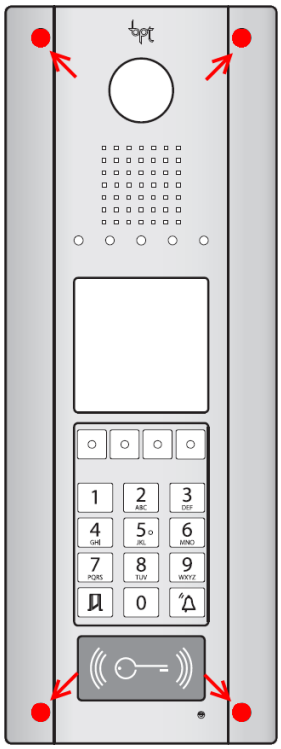

Fig. 3a

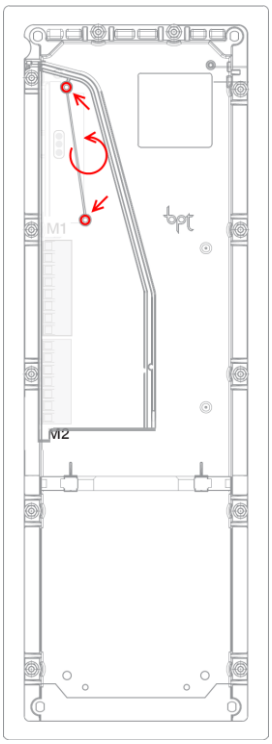

Fig. 3b

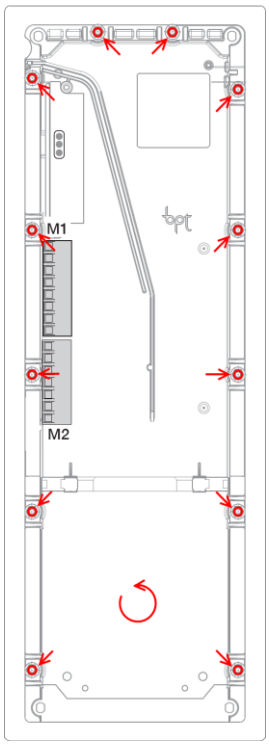

Fig. 3c

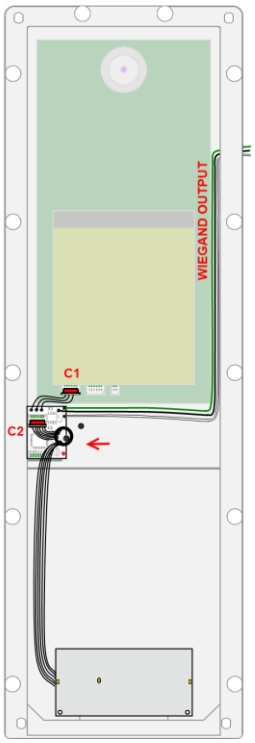

Fig. 3d

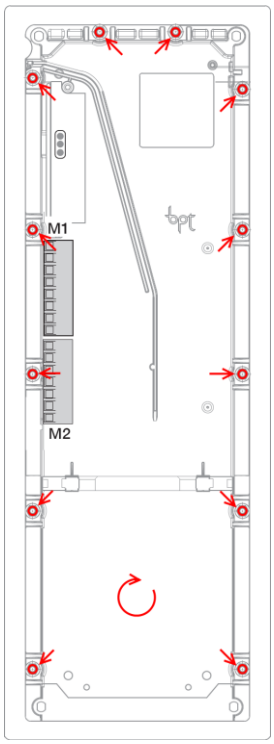

Fig. 3e

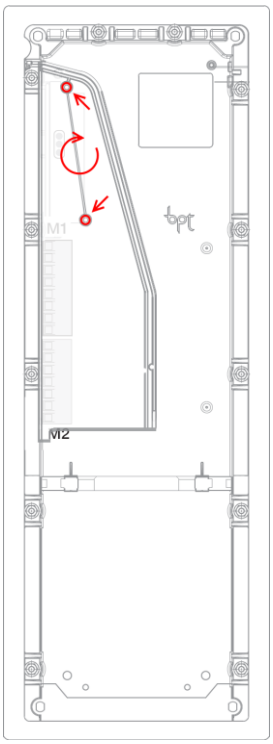

Fig. 3f

5 Setting parameters of the module

5.1 Configurable parameters

The *DIGIWGD* can be configured to output 26-bit, 32-bit (MSB), 32-bit (LSB), 34-bit, 37-bit, 40-bit or 56-bit Wiegand formats MIFARE® based on the CSN (card serial number) using above mentioned programming cards, see *Table 3*.

5.2 Module parameters setting

Present the proper programming card within 15 seconds after resetting the module. The module will be set to send the read cards in the Wiegand format defined by the presented programming card.