

E/O Converter Remote Controlled

DATASHEET - Version 1.0, Date: 12.03.2010



Fig. 1: Front montage version

Specification:

- Function: Electro optical digital converter for MOST150
- Input: LVDS+-, 100 Ohm
- Output: RC-LED 648 nm, Spectral width (FWHM) = 16nm
Light power level 0.5~+1.5 dBm, degradation 1 dB/1000h
- Timing: <= 150Mbps
- Communication: RS232: 38.4kbps, 1 Stop bit, 8 data bits, no parity
I2C: 100 kHz
- Option: Optical power meter
- Version: one device can combine 2 versions (remote controlled)

Version	Extinction ratio	Overshoot	Timing
Standard	> 20 dB	1 (no)	< 1ns
Low Bandwidth	10~12 dB	1 (no)	1~1.7 ns
High speed	10~12 dB	1.25	< 1ns

Technical data:

- Connector: RJ45 western 8 pin
- Optical con.: Fiber Pigtail: FSMA male, Fiber D=1.0mm, NA=0.5
Front Montage: FSMA female
- Fiber: Power: 9.0~12.1 VDC/100mA
- Temperature: 20 ~ 30 °C
- Dimension: 102 x 102 x 37, 180 g

Commands

Communication: ASCII characters with end char (CR=0x0D)

Command	Comand	Parameter	Operator	Data	Unit
Burn-In test	B	T = Time Q = Quantitiy G = int. Generator	:, ?, = ?, = :, ?, =	<0, 255> min h:m:s dBm °C mA 0=Off, 1=On	
EEPROM	E	L = Load factory S = Save	:		
Firmware	F	D = Date S = String	?, =		
High level	H	S = Set	?, =, :	<0.0, 100.0>	%
Low level	L	G = Get			
Current <10MHz	I	G = Get	?, =	<0; 1100>	mA
Mode	M		?, =, :	0 = Mode A 1 = Mode B	
Operating	O	T = Time	?, =	Hour:min:sec	
Power	P	G = Get	?, =	<-5.0; +5.0>	dBm
Reset	R	H = Hardware	None	none	
Serial	S	N = Number	?, =, ;	<POF094xxxx>	
Temperature	T	O = Optohousing	?, =	<15;40>	°C

Message frame

Command	Parameter	Operator	Data	Unit	CR
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I2C communication

Mater to Slave

Slave to Master

I2C write to the slave

START	Addr.+ R	ACK	Cmd	ACK	Par	ACK	Opr	ACK	Data	ACK	CR	ACK	STOP
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I2C read from the slave

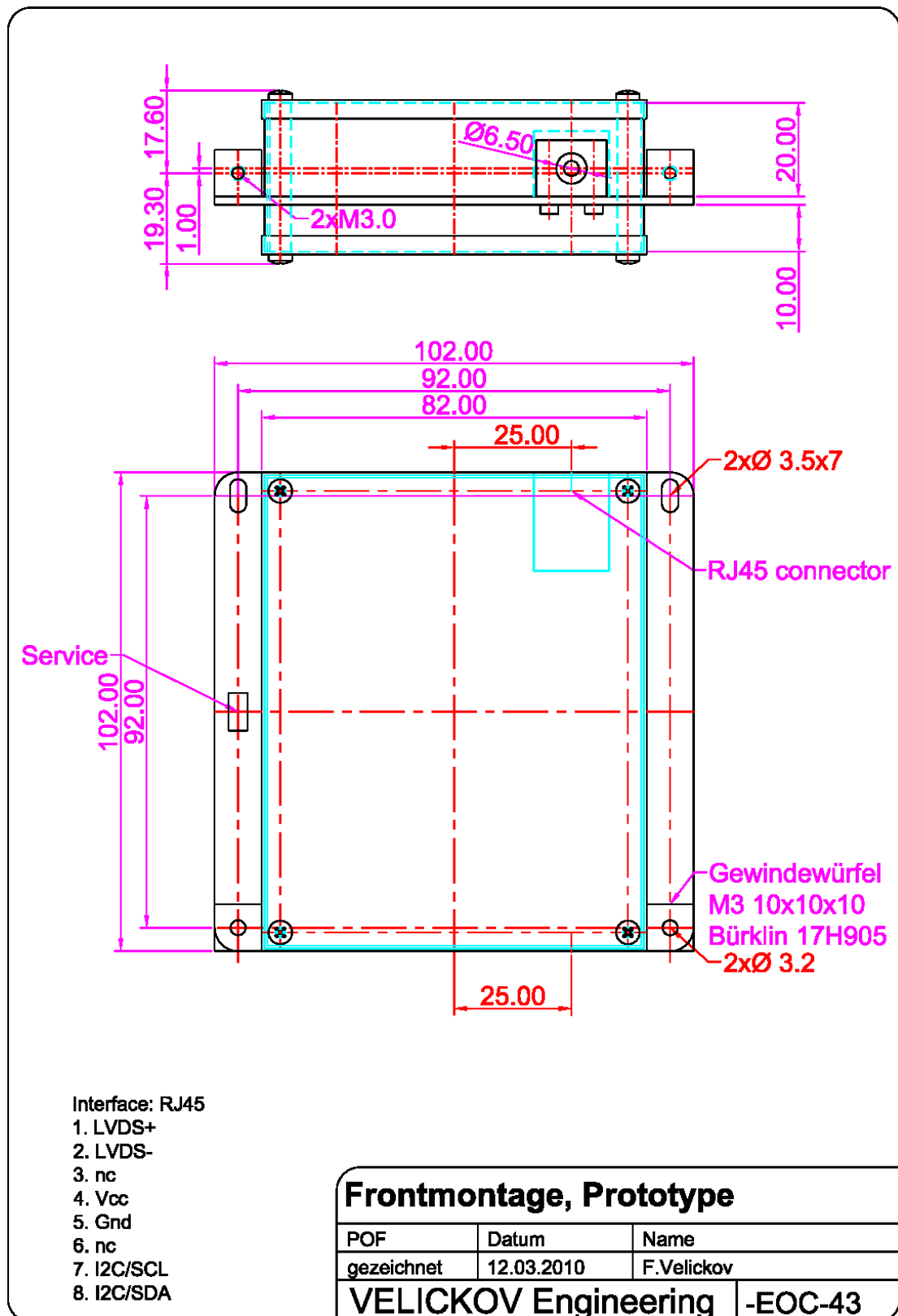
START	Addr.+R	ACK	Cmd	ACK	Par	ACK	Opr	ACK	CR	ACK
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START	Addr.+ W	ACK	Data	ACK	...	ACK	CR	ACK	0	NACK	STOP
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Example

Get high level setting: Send 'HS?<CR>' Receive 'HS=95.0%<CR>'

Set high level setting: Send 'HS:80.0%<CR>'



Specification are subject to change without notice.