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**PAT**

# LOAD MOMENT INDICATOR

## iFLEX5

Data Logger Operation



# DATA LOGGER OPERATOR'S MANUAL



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### MANUAL REVISIONS

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## TABLE OF CONTENTS

<b>1</b>	<b>GENERAL INFORMATION</b> .....	<b>1</b>
<b>2</b>	<b>PREREQUISITES</b> .....	<b>1</b>
<b>2.1</b>	<b>HARDWARE</b> .....	<b>1</b>
<b>2.2</b>	<b>SOFTWARE</b> .....	<b>1</b>
<b>3</b>	<b>USER GUIDE</b> .....	<b>2</b>
<b>3.1</b>	<b>READING A MEMORY CARD DIRECT WITH PC</b> .....	<b>2</b>
<b>3.2</b>	<b>DATA EVALUATION</b> .....	<b>2</b>
<b>4</b>	<b>SPECIAL LMI ERRORS</b> .....	<b>3</b>



## 1 GENERAL INFORMATION

The PAT data logger has been designed to provide the essential information and knowledge of how the crane used and operated.

**WARNING:** The data logger is an operational aid that can provide LMI system configurations and operating data.

The data logger can be setup to record the following data:

- Acquisition of the extreme values during a lifting event (DOS-Drive CAN)
- Acquisition of messages
- Acquisition of utilization counters
- Direct reading of a memory card with a PC (DOS-Drive CAN)

## 2 PREREQUISITES

### 2.1 HARDWARE

IFLEX CU : 021 020 06 0003
DOS-DRIVE CAN with memory card 16/32 MByte (not used for overload recorder)
PC with PCMCIA slot for parameterization via terminal and data management

### 2.2 SOFTWARE

LMI program version CGMK 1.42up (C-Structure)
C-Structure: PC program DS350C for parameterization of the data and load chart files
PC program iTOOL5 / iFLASH V4.95 for parameterization, download (overload recorder)
PC program AUSWERT V2.06up for data management

### 3 USER GUIDE

#### 3.1 READING OUT A MEMORY CARD DIRECT WITH PC (DOS-DRIVE CAN)

Step no.	Action
1	Switch off iflex5
2	Take memory card out of the DOS-DRIVE CAN slot
3	Copy the data logger file from the memory card to the hard disk of the PC
4	put memory card into the DOS-DRIVE CAN slot

#### 3.2 DATA EVALUATION

The PC program GBASE or AUSWERT is used for data evaluation. The data transfer is carried out direct on the PC with PC CARD drive.

#### 3.3 DATA LOGGER INITIALIZATION

Step no.	Action
1	Parameterization LMI
2	Connect DOS-DRIVE CAN with the iflex5
3	Switch on the LMI Terminal display: <b>LMBP02: F= Datalogger</b> <b>LMBP02: Init CAN Datalogger (DOS-Drive CAN)</b>
6	Press the button "F" Terminal display: <b>USER NO:</b>
7	Input the user number 17848, then press the button "ENTER" Terminal display: <b>&lt;&lt; Datalogger System Setup &gt;&gt;</b> <b>&lt; T &gt; Setup Time base</b> <b>&lt; L &gt; Initialize Memory card</b> <b>&lt; C &gt; Counter Calibration</b>
8	Press the button "T", then setup date and time After every change the system resets to. Only after a reset the system clock is changed.
9	Press the button "C", then setup the utilization counters. The utilization counters are deactivated, if the maximum count, option "<2> Counter Limit" of the respective counter is set to "0"
10	Press the button "L" Terminal display: <b>Crane No: &lt;crane number&gt;</b>
11	Input of the crane number, or enter old crane number. Press the button "ENTER" Terminal display: <b>Crane number: 12345678</b>



	<b>Format Datalogger: dosdrive_format_status:0</b> (DOS-Drive CAN)
	<b>Create File: dosdrive_create_status:0</b> (DOS-Drive CAN)
	Reset is carried out Terminal display:
	<b>LMBP02: F= Datalogger</b>
	<b>LMBP02: Init CAN Datalogger</b> (DOS-Drive CAN)
	➡ <b>CAN_Datalogger: OF</b>
	<b>CAN_Datalogger: ON</b>
	data logger is now prepared for operation

## 4 SPECIAL LMI ERRORS

Error codes see documentation of the LMI.

The following codes are logged, but not displayed on the console.

Error code	Cause
A1	A2B switched
A3	Prewarning LMI

The following code is not logged, but displayed on the console.

Error code	Cause	Elimination
EDA	Datalogger write error	To quit the error message, press the horn button on the console. To see the cause of the error look at the status display at terminal operation. Data should be transferred and checked ASAP.
EDB	Datalogger setup error	To quit the error message, press the horn button on the console. To see the cause of the error look at the status display at terminal operation. Data should be transferred and checked ASAP. New setup of the datalogger is required.
EDC	Datalogger watchdog activated	To quit the error message, press the horn button on the console. To see the cause of the error look at the status display at terminal operation.
EDD	Battery empty	To quit the error message, press the horn button on the console. Change battery on the main board

**Dos drive status (DOS-Drive CAN)**

0 DOS\_DRIVE\_SUCCESS  
1 DOS\_DRIVE\_EACCES  
2 DOS\_DRIVE\_EINVACC  
3 DOS\_DRIVE\_EMFILE  
4 DOS\_DRIVE\_ENOENT  
5 DOS\_DRIVE\_EBANDF  
6 DOS\_DRIVE\_EBADNAME  
7 DOS\_DRIVE\_EBANDSLOT  
8 DOS\_DRIVE\_ENOSPACE  
9 DOS\_DRIVE\_EVERIFY  
20 DOS\_DRIVE\_GenERROR  
21 DOS\_DRIVE\_HardwareBAD  
22 DOS\_DRIVE\_NoSuchSLOT  
23 DOS\_DRIVE\_NoCARD  
24 DOS\_DRIVE\_HeaderBAD  
25 DOS\_DRIVE\_SektorBAD  
26 DOS\_DRIVE\_UnknownMEMORY  
27 DOS\_DRIVE\_EraseERROR  
28 DOS\_DRIVE\_NotEnoughMEMORY  
29 DOS\_DRIVE\_WriteCardERROR  
30 DOS\_DRIVE\_WritePROT  
31 DOS\_DRIVE\_ReadCardERROR  
40 DOS\_DRIVE\_TIMEOUT\_ERROR  
41 DOS\_DRIVE\_RECEIVE\_ERROR  
42 DOS\_DRIVE\_LENGTH\_ERROR  
43 DOS\_DRIVE\_CHECKSUM\_ERROR  
44 DOS\_DRIVE\_COMMAND\_ERROR  
45 DOS\_DRIVE\_PARAMETER\_ERROR  
46 DOS\_DRIVE\_FLASH\_ERROR  
128 DOS\_DRIVE\_NO\_RTOS\_MEM  
129 DOS\_DRIVE\_NOT\_INIT  
130 DOS\_DRIVE\_NO\_BAUDRATE  
131 DOS\_DRIVE\_CAN\_NOT\_INIT  
132 DOS\_DRIVE\_CAN\_NO\_ANSWER  
133 DOS\_DRIVE\_ILLEGAL\_TAN  
134 DOS\_DRIVE\_TIMEOUT  
135 DOS\_DRIVE\_TOO\_MANY\_BYTES  
137 DOS\_DRIVE\_CHANNEL\_ERROR  
138 DOS\_DRIVE\_FILE\_NOT\_OPEN  
139 DOS\_DRIVE\_END\_OF\_FILE  
140 DOS\_DRIVE\_NO\_CONNECTION  
252 DOS\_DRIVE\_PARTLY\_RESPONSE  
253 DOS\_DRIVE\_ONLY\_ACK  
254 DOS\_DRIVE\_NOSTATUS  
255 DOS\_DRIVE\_BUFFER\_NOT\_FREE

Status 0 and 252..255 is ok. The rest are errors and cause an error "E DA" on the console.