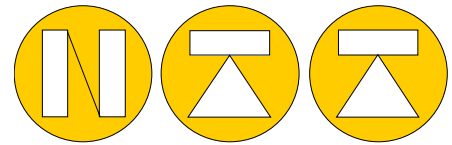


# LDU<sup>®</sup> 69.1-EN

## Load Cell Digitizing unit



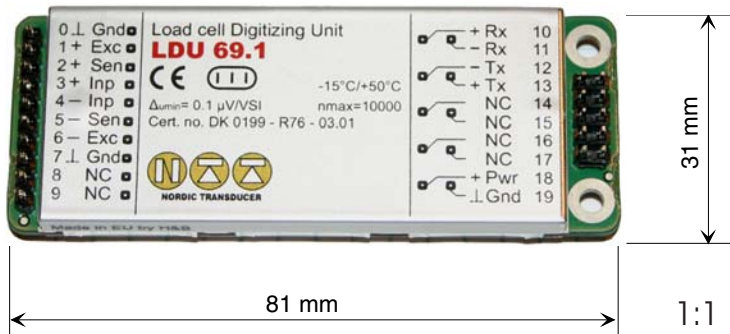
**NORDIC TRANSDUCER**

**LDU 69.1-EN** is produced for usage in connection with force measuring jobs, to which there is asked for very high demand what accuracy and stability are concerned, as there typical is for **EN ISO376** type of jobs.

**LDU69.1-EN** do have not less than +/- 1,050,000 internal count and this is done at a rate of 86 conversion per sec.

All setup and data communication is done by means of data communication to PC or operator terminals.

Advanced **TAC** security system for control of calibration data change is also a standard part of the LDU 69.1-EN

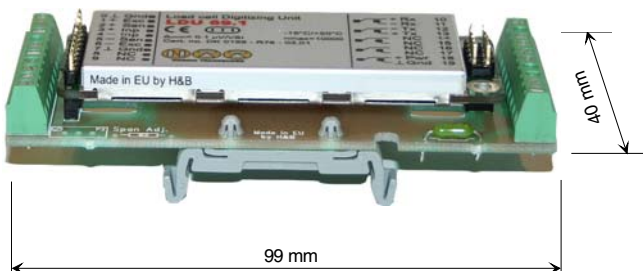


*LDU 69.1 shown here in natural size for direct connection by soldering.  
Only 6mm thick*

*Other way of mounting please look below*

<b>Data LDU 69.1 EN10002-3</b>	<b>Data</b>	<b>Comments</b>	<b>Commands</b>
Load cell excitation:	5 AC ( square polarity shift)		
Load cells:	250 - 2000 Ohm	( can be = 4 * 1000 Ohm cells )	4 or 6 wire
Load cell input range:	±11mV	same as ± 2,2mV/V	
Zero setting range:	+/-2,0mV/V subtractive	TAC**	ASCII
Span max. Digital.	Factor in n increments/mV/V input	TAC	ASCII
Calibration, interpolation:	7 points from -max over zero to +max.		
Calibration security:		TAC	ASCII
A/D conversion:	±1.050.000 conv./sec max. at 86 conversions /sec.		
Signal filter adjustable:	From 0,2 to 3Hz		ASCII
Signal filter types:	Gauss; Bessel; Butterworth		ASCII
Display output:	5 updates per sec.		ASCII
Hardware interface:	RS485, RS422-fuld duplex 32 addresses		ASCII
Transmission speed:	9.6, 19.2, 38.4, 57.6, 115.2 kB		ASCII
Transmission type:	Auto transmit or get result on command.		
Linearity:	Typical 1:200.000	in worst case 1:100.000	
Temp. effect on zero:	Typical <1ppm/°K,	max. 2ppm/°K	
Temp. effect on span:	Typical <1ppm/°K,	max. 2ppm/°K	
Temperature range:	Compensated from -10°C to +40°C		
EMC protections:	All I/O pins protected by T-filters, range 0,1 - 1000 MHz at <3V/m		
Power supply:	12-24 VDC max. 60mA, protected against reversed voltage.		
Conform to Council Directive:	CE in accordance with both 73/23/EEC, 93/98/EEC and 89/336/EEC ( LDU 69.1 can also be supplied in a version for OIML R76 and 10000 n <sub>max</sub> )		

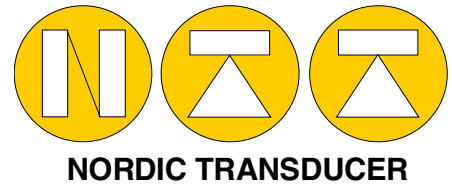
(\* \*\*TAC stands for Traceable Access Code which do secure that all calibration changes gets recorded)



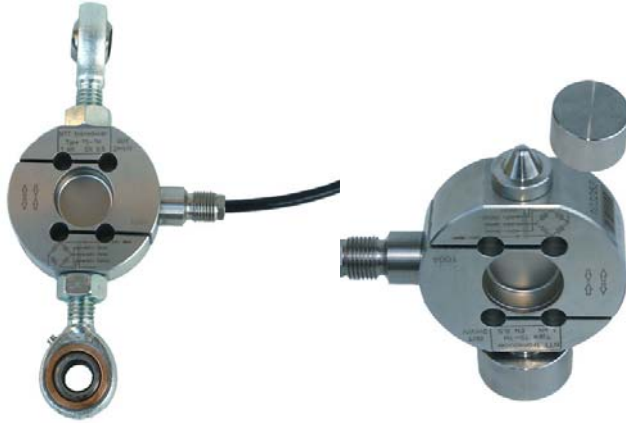
**LDU 69.1** here shown with PC board and screw terminals for DIN rail = option **UA73.2**  
Similar type of PC board but supplied with an RS232/422 converter = option **UA77.1**

# LDU<sup>®</sup> 69.1-EN

Load Cell Digitizing unit



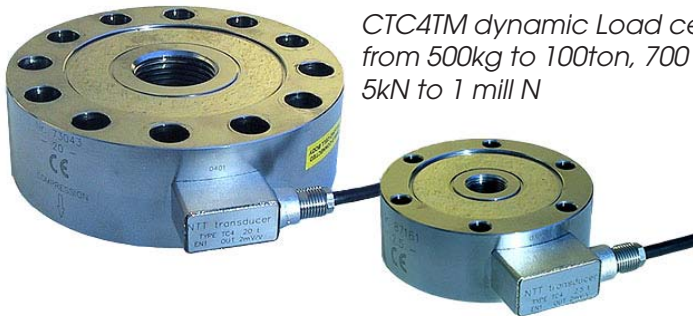
## Typical EN ISO376 Load cells used in combination with LDU69.1-EN



*TS-TM compression or tension/compression  
0.5kN -75kN, 350 Ohm*



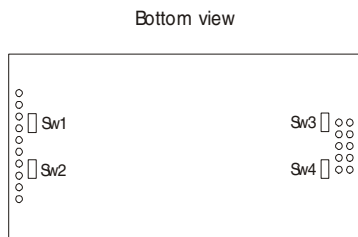
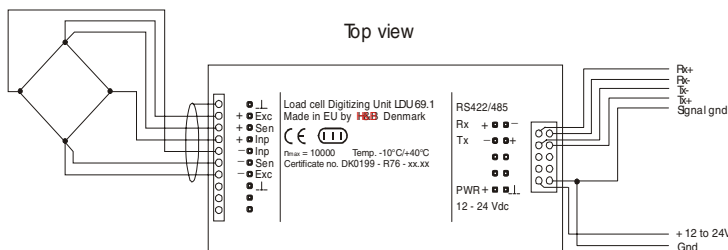
*C8S supplied from 500kg to 100ton  
700 ohm or 5kN to 1mill N*



*CTC4TM dynamic Load cells  
from 500kg to 100ton, 700 ohm  
5kN to 1 mill N*



*TCE-TM compression or tension/  
compression 5kN -100kN  
440 Ohm*



Sw1 & Sw2 : Close for 4-wire loadcell  
Sw3 : Close to enter configuration mode  
Sw4 : Do NOT close - used for program download