

## WEIGHING INDICATOR & HIGH SPEED TRANSMITTER



The SWIFT is a weighing indicator and high-speed transmitter that is ideal for static and dynamic applications. Its mounting versions in DIN rail or panel make it particularly suitable for weighing applications in industrial processes and machinery. Its many possibilities of data transmission, digital inputs and outputs enable easy connection to PLC, PC and remote systems, in the main standards of industrial communication.

- **Display** 6 digit 10 mm LED.
- **High resolution:** 24 bits ADC with 16.000.000 internal divisions and 100.000 external divisions.
- **High speed reading:** 2400 measures per second.
- **Configuration and calibration by keyboard or computer.**
- **Calibration by Masses or in mV/V**, allowing the start-up without calibration masses entering the load cell capacity and sensitivity in mV/V.
- Selectable **digital filters**.
- **Calibration sealing** by software or mechanically.
- **Power up to 8 load cells (350 Ω) or up to 16 load cells (700 Ω).**
- **Communication RS-232 & RS-485** (ModBus RTU & ASCII) and optional Profibus, Profinet or Ethernet/IP.
- **Analogue output configurable** at 0-5 V, 0-10 V, 0-20 mA & 4-20 mA, with galvanic isolation.
- **3 Digital opto-isolated inputs** with status LED.
- **3 Digital outputs** to relay with status LED.
- **DIN rail or Panel** mounting.
- **Power supply** 10 - 28 V DC.

### Applications:

- Weighing and Level Measurement in Tanks & Silos.
- Filling and Dosing Machines.
- Check-Weigher Scales.
- Animal Weighing Scales.
- Test Machinery.
- High Speed Dynamic Sorting Scales.
- Multihead Scales.
- PC/PLC Weight Transmission.
- Multiple Weight Indicators in the same Bus.
- Crane overload control.

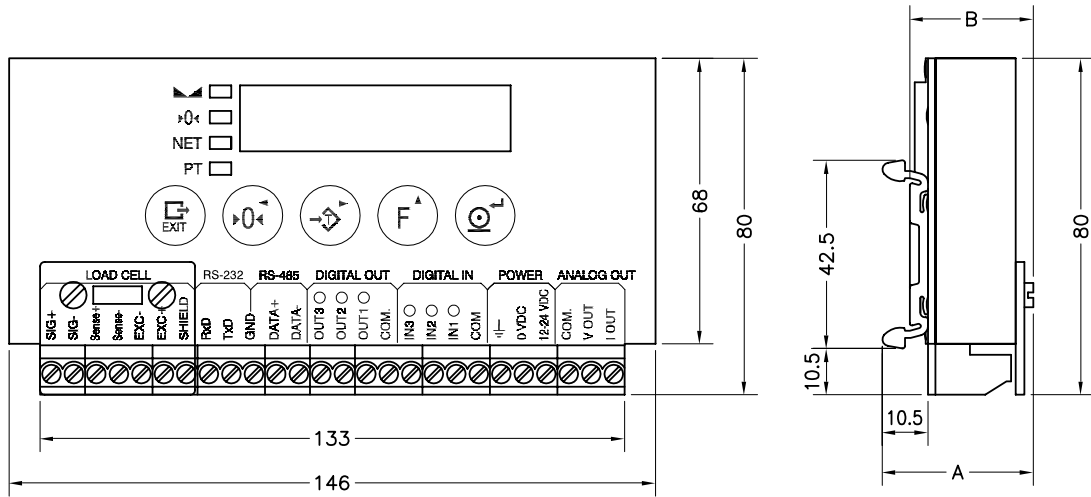
### ACCESSORIES:

- **89458** Mounting Box
- **89459** Power supply 100-240 V AC at 24 V DC, 15 W, DIN rail mounting
- **89469** Front cover IP 65 protection



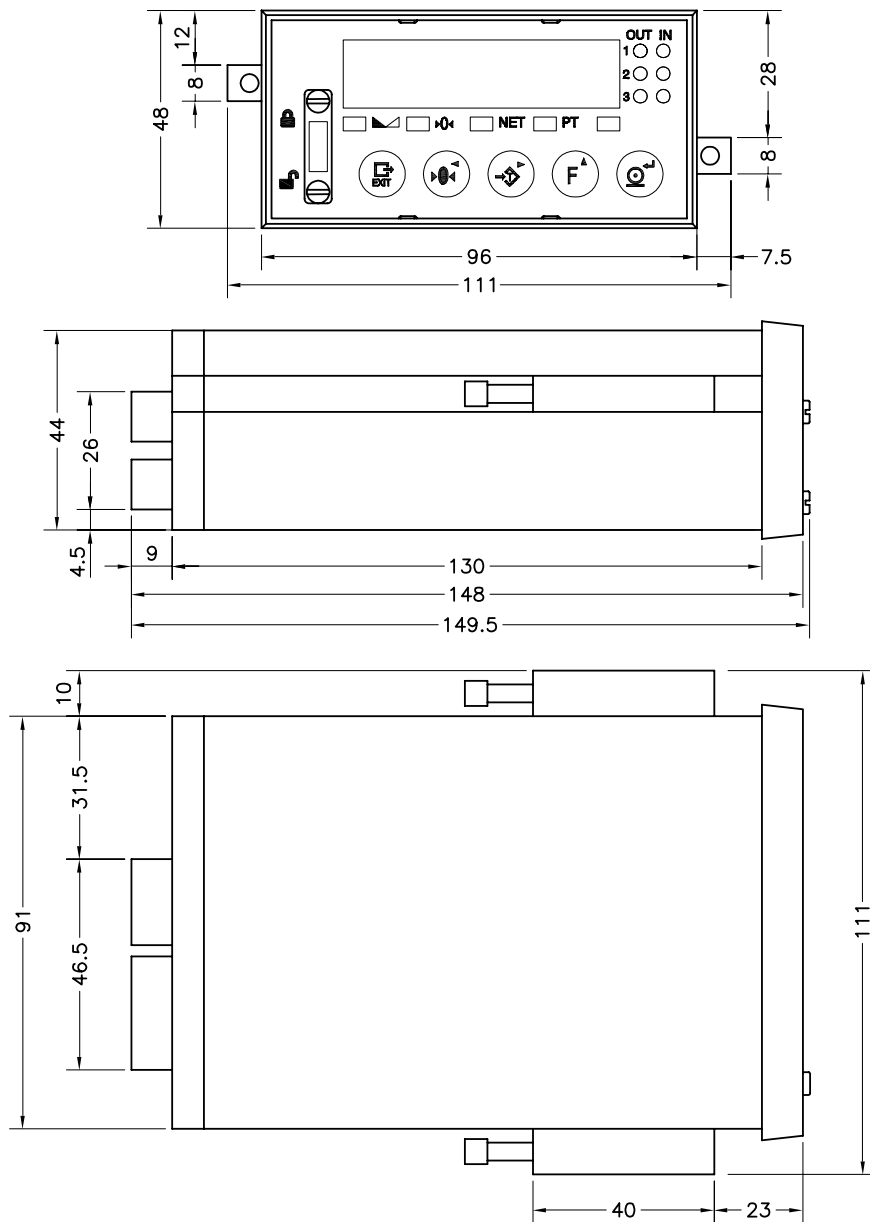
Transport weight: 0.1 kg

### SWIFT DIN rail mounting



Version	A	B	Transp. weight
89450-89451	34	29	0.3 kg
89452/53/54-89472/73/74	38	33	0.35 kg
89470-89471	30	25	0.3 kg




### SWIFT Panel mounting



Dimensions in mm.

Transp. weight: 0.25 kg

## VERSIONS

	Ref.	Name	Display	0/20 mA 4/20 mA	0/5 V 0/10 V	RELAY OUTPUTS	DIGITAL INPUTS	COMMUNICATIONS
 <b>SWIFT RAIL</b>	89450	SWIFT RAIL RS+ANALOG	✓	✓	✓	3	3	RS-232 / RS-485 MODBUS
	89451	SWIFT RAIL RS	✓			3	3	RS-232 / RS-485 MODBUS
	89452	SWIFT RAIL PROFIBUS	✓			3	3	RS-232 / RS-485 MODBUS PROFIBUS
	89453	SWIFT RAIL PROFINET	✓			3	3	RS-232 / RS-485 MODBUS PROFINET
	89454	SWIFT RAIL ETHERNET/IP	✓			3	3	RS-232 / RS-485 MODBUS ETHERNET/IP
 <b>SWIFT COM</b>	89470	SWIFT COM RS+ANALOG		✓	✓	3	3	RS-232 / RS-485 MODBUS
	89471	SWIFT COM RS				3	3	RS-232 / RS-485 MODBUS
	89472	SWIFT COM PROFIBUS				3	3	RS-232 / RS-485 MODBUS PROFIBUS
	89473	SWIFT COM PROFINET				3	3	RS-232 / RS-485 MODBUS PROFINET
	89474	SWIFT COM ETHERNET/IP				3	3	RS-232 / RS-485 MODBUS ETHERNET/IP
 <b>SWIFT PANEL</b>	89460	SWIFT PANEL RS+ANALOG	✓	✓	✓	3	3	RS-232 / RS-485 MODBUS
	89461	SWIFT PANEL RS	✓			3	3	RS-232 / RS-485 MODBUS
	89462	SWIFT PANEL PROFIBUS	✓			3	3	RS-232 / RS-485 MODBUS PROFIBUS
	89463	SWIFT PANEL PROFINET	✓			3	3	RS-232 / RS-485 MODBUS PROFINET
	89464	SWIFT PANEL ETHERNET/IP	✓			3	3	RS-232 / RS-485 MODBUS ETHERNET/IP

## TECHNICAL SPECIFICATIONS

### Load cell connection:

Scale input signal range .....  $\pm 3.9$  mV/V

Resolution ..... ADC 24 bits; 16.700.000 internal divisions  
Display -99 999...999 999

Measuring rate ..... Internal: 2400 readings per second  
Transmission: 600 readings per second

Linearity error .....  $\leq 0.01$  % of measuring range

Thermal stability ..... Zero: 150 nV/°C max  
Span: 3.5 ppm/°C max

Load cell excitation voltage ..... 5.0 V DC

Minimum load cell resistance ..... 43  $\Omega$  (8 load cells of 350  $\Omega$ , 16 load cells of 700  $\Omega$ )

### Inputs & Outputs:

Serial communications ..... RS-232 bi-directional  
RS-485 half-duplex  
Protocol: Own protocol, ModBus (RTU & ASCII)  
Transmission rates: 4800...115200 bauds selectable

Logical Inputs & Outputs ..... 3 opto-isolated inputs with status LED  
3 relay outputs max. 125 V AC - 30 V DC, 100 mA, with status LED

Analogue output (Version SWIFT RS+ANALOGUE)..... Output with galvanic isolation, DAC of 16 bits  
Output voltage: 0-10 V Output current: 0/4 - 20 mA (<500  $\Omega$ )

Profibus communication (Version PROFIBUS) ..... Profibus DP-V0 (Slave)

Profinet communication (Version PROFINET)..... Profinet I/O Realtime (Class A)

Ethernet/IP communication (Version ETHERNET/IP)..... Ethernet/IP

### Power, working condition and mechanical data:

Power supply ..... 10 V to 28 V DC

Power consumption ..... 4 W (6 W for Profibus, Profinet and Ethernet/IP version)

Temperature range..... -20 °C to 50 °C operating; -25 °C to 60 °C storage

Protection ..... IP 40

Operator interface ..... Display: 6 digit LED 10 mm; Keyboard: 5 keys

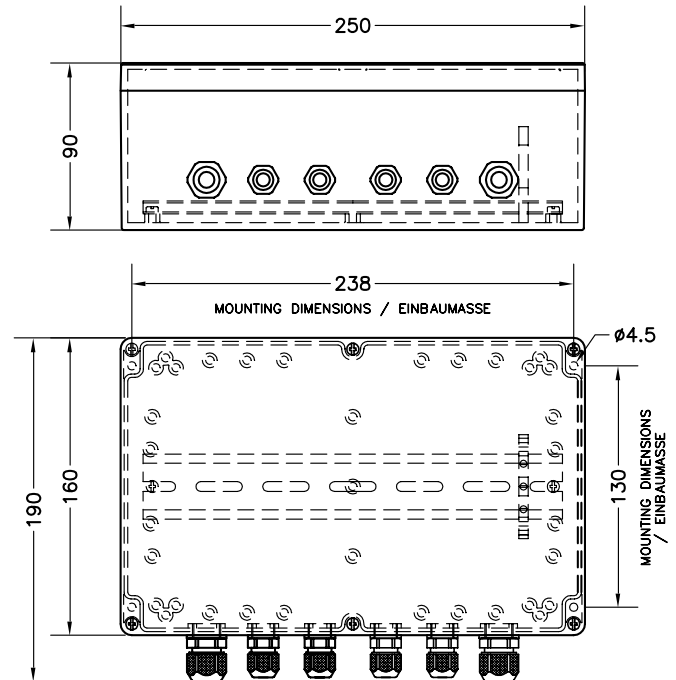
## ACC. MOUNTING BOX FOR SWIFT RAIL / COM

## ACC. MONTAGEGEHÄUSE FÜR SWIFT RAIL / COM



The SWIFT indicator and the power supply are provided separately.

Das SWIFT Wägemodul und das Netzteil werden separat verkauft.



Dimensions in mm. / Abmessungen in mm.  
 Transport weight: 1.1 kg / Transportgewicht: 1.1 kg

Hermetic plastic box with transparent cover for assembly of SWIFT RAIL / COM weighing indicator and its power supply. Ideal for protection on industrial environments and outdoor applications.

- Protection class IP 66 (EN 60529)
- Impact resistance IK 07 (EN 50102)
- Wall mounting ability
- Standard 35 mm DIN rail
- Earth terminal pre-assembled
- Earth cable entry through four PG7 cable glands and two PG9

Hermetisch dichtes Kunststoff-Gehäuse mit transparentem Deckel geeignet für den geschützten Einbau von unserem SWIFT RAIL / COM Wägemodul und das entsprechende Netzteil in einer industriellen Umgebung oder Anwendungen im Freien.

- Schutzart IP 66 (EN 60529)
- Stossfestigkeit IK 07 (EN 50102)
- Wandmontage möglich
- Standard DIN-Hutschiene 35 mm
- Vormontierte Erdungsklemme
- Kabeleinführung durch vier PG7 und zwei PG9 Kabelverschraubungen

## 89469 ACC. FRONT COVER IP 65 FOR SWIFT PANEL

## 89469 FRONTABDECKUNG IP 65 FÜR SWIFT PANEL

Flexible front cover to provide IP 65 protection to the SWIFT PANEL. It allows easily handle the keyboard of the device.



Die flexible Frontabdeckung für unserem SWIFT PANEL ermöglicht mit Schutzart IP 65 die perfekte Bedienung von den Tasten.