

# Stroboscope Model DT-315N

Measuring range 40 - 35000 flashes per minute (rpm, min-1)

Frequency range 0.7 - 585 Hz

Hand held stroboscope for non-contact determination of revolutions, for monitoring moving parts and ascertain the oscillation frequency of running systems.

Mains or battery operation with LED display

## Operating elements

- Signal switch: for switching from internal to external signal (triggering)
- x 2 switch: for doubling the flash rate
- : 2 switch: for dividing the flash rate
- Speed setter: for setting the flash frequency and delay angle for trigger mode
- Input (trigger signal)
  - Output (for sensor connection)
- Display unit switch (only in trigger mode)
  - rpm: displays flashes per minute
    - from 40.0 to 35000 min-1
  - deg: Displays flashes delay angle in degrees from 0 to 359°
- + switch: When an object appears to be standing still, pressing this switch will give the illusion that the object is moving towards the rotating direction at a speed of 1 rotation in 6 seconds.
- - switch: When an object appears to be standing still, pressing this switch will give the illusion that the object is moving in the reverse direction at a speed of 1 rotation in 6 seconds.
- 9. Power switch



## Features

### Standard Features

- Easy to operate controls
- Detachable pistol-grip handle and mounting possibility on tripod
- Xenon-longlife flash tube
- Rugged aluminium housing
- Certificate of Compliance with the order 2.1 according EN 10204 is included

### Special Features

- Combined battery and mains operation
- Easy to read LED display
- Big reflector assures good illumination of the monitoring object
- 350 Lux (depending on flash rate) at a distance of 50 cm
- Double-flash (x 2) and half-rate (: 2) flash selection for easy determination of true flash rate
- Accepts external trigger input: Phase shift adjustment 0° to 359° permits observing movements of objects in slow-motion
- Flash delay switch to move a freezed object slowly within 6 s
- Output signal for synchronize and trigger more stroboscopes

## Technical specifications

### Flash range

0,7 - 585 Hz = 40 - 35000 min-1 (rpm)

Automatic range control

### Accuracy

± 0,1 % of reading, ±1 digit

### Resolution

40 - 4999 min-1: 0.1 min-1; 5000 - 7999 min-1: 0.2 min-1

8000 - 9999 min-1: 0.5 min-1; 10000 - 35000 min-1: 1 min-1

### Light intensity

Approx. 350 Lux (depending on flash rate) at a distance of 50 cm

### Flash duration

10 - 40 µsec

### Display update time

Approx. 0.2 s

### Temperature range

5 - 45 °C

### Display

LED 5 digit, 10 mm high

### Flash tube

Xenon, 10 W (100 million flashes), colour white 6500K

### Phase shift

0° - 359° (in 1° resolution)

### Triggering input signal

H-Level: 2.5 - 12 V

L-Level: 0 - 0.8 V, pulse width minimum 50 µs, positive edge trigger; input resistance approx. 4.7 kΩ

### Output signal

12 V ±0.6 V DC, 40 mA, 400 µsec

### Tripod fixing

1/4"

### Power supply\*

10.5 - 15 V DC (2.3 A), NiCd battery (1 h continuous use) and/or AC adapter 100...230 V DC

### Air humidity

85 % RH, max.

### Housing material

Aluminium profil/ABS

\*Standard 230 V (Should you require 115 V, please indicate in your order - extra charge)

## Physical specifications

### Dimensions

250 x 120 x 120 mm (L x W x H)

### Weight, net (gross)

Approx. 2000 g (ca. 3200 g)

## Delivery includes

Stroboscope with case, 1 trigger plug, AC adapter/re-charger, Certificate of Compliance with the order 2.1 according EN 10204 free of charge and operating instruction in german and english

## Optional accessories

- Rubber End Caps Code H: End caps for shock-absorbing design
- Calibration Report: Inspection Certificate 3.1 according DIN EN 10204 including a calibration report is optional available.

## Spare Parts

- Flash Tube
- Spare Accumulator
- Spare Accumulator: 2-pole connector (old model)
- Spare Accumulator: 4-pole connector (old model)
- Recharger: 230 V AC

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