

# X-Rite 301 Transmission Densitometer

## Provides Accurate Quality Control of Your Film Processor

The end product of your x-ray, microfilm or photographic processing equipment is only as good as the quality control technique you use. The X-Rite Model 301 is designed to help you keep your film processor producing optimum results.

This densitometer will detect variations in film density far more subtle than can be seen by the naked eye. Its wide measurement range allows you to determine base fog and accurately determine densities up to 5 D.

A new feature has been added to the Model 301-RS-232 output. Now you can connect it to a digital printer or computer. This provides a convenient record or an opportunity to use a computer to calculate the data from a step wedge.

## Convenient Operation

The densitometer is easy to use, measurements are made on a push and read basis. The display consists of large LED numerals which can be read easily in bright or dim light. Internal memory and the null button allow the operator to make comparative density measurements across a piece of film.

Other quality features include a lighted work table, simple calibration procedure and rugged construction. The densitometer will remain in proper alignment even though it is picked up by the arm.

The Model 301 is U.L. listed and is shipped calibrated to standards traceable to the NBS. This is probably the most widely accepted and used densitometer for medical and industrial x-ray requirements and in the micro-graphics industry.

### Power Requirement

301 (Domestic) 100VAC-130VAC, 60Hz  
301X (Export) 200VAC-240VAC, 50Hz  
(80VA max.)

### Warm-up Time

60 seconds

### Scale Factor Stability

± 1% per 6 months



The Model 301 has an easy-to-read display, lighted work surface, and simple calibration.

### Added Benefits:

- **Easy-to-Read Display** : Large half-inch LED numeric display for easy reading and fewer errors.
- **Lighted Table** : Simplifies location of image areas to measure.
- **Rugged Construction** : Proven oil field use.
- **Convenient Service**: Modular construction allows repaired replacement of lamps and easy access to electronic circuits.
- **One Year Limited Warranty** (bulb Excluded).

### Option

301X—230V, 50Hz power line  
301RS—RS-232 serial output—300 baud

### Specifications

#### Measuring Range

0-5.0D with 2 and 3mm apertures  
0-4.0D with 1mm aperture

#### Accuracy

± .02D

#### Repeatability

± .01D

#### Operating Temperature Range

10° - 40° C

### Null Drift

± .03D nu.  
± .01D typical

### Dimensions

Height 5.25 inches (13.3cm)  
Width 10.25 inches (26.0cm)  
Length 15.0 inches (38.0cm)

### Weight

8.5 lbs. (3.9kg)  
Design Conformance meets A.N.S.I.\*  
PH 2.19—1974 requirements

\*American National Standards Institute

### Film Types

The Model 301 is designed to measure all silver based films. If your requirements include diazole and vesicular films, we suggest the X-Rite Model 369 Densitometer. Contact your dealer or X-Rite for more information.