

# Affordable Quality for a Variety of Healthcare Settings

The TeleradPRO medical film digitizer was developed in response to emerging markets' clinical demands for a medical quality x-ray film digitizer for general radiology, PACS, and teleradiology applications. This new class of device needs to be productive, highly reliable and still affordable. Developed by VIDAR Systems Corporation, the TeleradPRO represents a significant advance in film digitizer technology that overcomes some of the most common barriers to using medical grade digitizers - the need for routine maintenance or on-site service, image variability, size and of course cost. It features VIDAR's unique ADC (Automatic Digitizer Calibration) that results in virtually no variation in image quality and ensures excellent grayscale reproduction in every image – a feature lacking in flatbed or simple non-medical scanners. The TeleradPRO meets the needs of healthcare professionals who want medical quality images and an affordable film digitizer capable of being integrated into a variety of healthcare settings, including at the point of care.

### **Prior Studies & Film Digitizing**

Prior studies are critically important because they allow comparisons across time for new studies vs. older studies even when those were done on different modalities, resulting in better diagnoses and patient outcomes. With the ability to digitize medical films into PACS and teleradiology or telemedicine systems/stations, the TeleradPRO aids radiologists with diagnostic tasks since they have the prior images where and when they need them.

Digitizing film into softcopy makes reading more comfortable for radiologists since they are not forced to constantly switch back and forth between low-light output monitors and bright light boxes to compare old studies. And digitizing film into a PACS solution allows for future digital growth.



#### **TeleradPRO**<sup>™</sup>

### Soft Copy Reading and Productivity

Softcopy reading allows the full clinical value of digital modalities and the increase in productivity that administrations demand when they must justify a modality – PACS or a teleradiology system investment. If users are forced to continue to use film for reading and archiving studies, costs actually increase when they go "digital." In addition, no sensitivity from reading stacked CT/MRI images, or 3D/quantitative analysis, or instant consultations for critically ill patients can be realized since film is a "one instance" media and is limited to one place and typically one user at a time.

The TeleradPRO is supported by VIDAR's excellent customer service and it also delivers unmatched stability, consistency, reliability and ease of use.



**Telerad**PRO<sup>™</sup>

#### Medical Film Digitizer for General Radiology & Teleradiology

Nominal Resolution	Pixels (14" x 17" Film)	Spot Size (µm)	DPI	Line Pairs per mm	Digitizing Speed
1K x 1.25K	1008 x 1124	339	75	1.5	<10 Seconds
2K x 5K*	2002 x 2431	169	150	3.0	<20 Seconds
4K x 5K	4200 x 5100	85	300	5.8	<40 Seconds

\*ACR Standard for Teleradiology Guidelines [Revision 35 (1998)] recommends 2.5 line pairs/mm minimum

## **Specifications**

Optical Density DMAX	4.8			
Clinical Optical Density	3.2 (calculation based on noise and linearity to original OD to provide a more consistent measurement for medical applications)			
Bit Depth	8, 12, and 16-bit output (16-bit ADC)			
MTBF	>35,000 hours			
Film Sizes	Width: 7" to 14" (17.8 cm to 35.6 cm) Length: 7" to 17" (17.8 cm to 43.2 cm) up to 51" (130 cm) can be accommodated in single film mode Thickness: 0.006" to 0.008 (0.15 mm to 0.20 mm)			
Film Feeder	Multi-sheet standard – 10 sheet, mixed film size "Light Box" loading: head-up, normal reading, left justified Film sizes up to 14" x 17" (35.6 cm x 43.2 cm)			
Translation Tables	Linear OD			
Geometric Accuracy	Better than 1% or 2 pixels, whichever is greater, in both axes			
Hardware Interface	USB 2.0			
Software	Windows $^{\ensuremath{\mathbb{R}}}$ scanning modules and software development tools available			
Power Requirements	Voltage: 100~240 Vac Frequency: 50~60 Hz Power: <u>&lt;</u> 48 Watts			
Operating Environment	60° to 85° F (15° to 30° C), 20% to 85% relative humidity, non-condensing			
Storage Environment	5° to 140° F (-15° to 60° C), 20% to 85% relative humidity, non-condensing			
Illuminator	LED Illuminator			
Detector	CCD			
Dimensions	Footprint: 19" W x 13.30" D (48.26 cm x 33.78 cm)   Overall: 19" W x 18.5 D" x 37.65" H (48.26 cm x 33.78 cm x 95.63 cm)   Shipping: 27" W x 18.5" L x 27.38" H (68.6 cm x 46.99 cm x 69.55 cm)			
Weight	30 lbs. (13.61 kg); shipping weight: 48 lbs. (21.77 kg)			
Specifications are subject to cha	nge without notice			
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