

# TC8276 Series VidQuad<sup>®</sup> Video Processors

- Selectable Quad/Full Screen Display
- Two Monitor Outputs
- Real Time Update Rate
- Sequence Capability
- Alarm, Freeze, and Video Loss Functions
- No External Synchronization



The TC8276 Series video processors digitally capture the full video from four sources, reduces these images to quarter-screen size, and combines them to provide a quad display. The TC8276 Series will accept both monochrome or color inputs. The output will be a monochrome quad display. Any color inputs will display color in the full screen mode.

The TC8276 accepts inputs from any EIA, RS-170 525 line, 2:1 interlaced source. The TC8276X accepts inputs from any PAL, CCIR 625 line, 2:1 interlaced source. These units will accept inputs having video signals in the range of 0.5 Vp-p to 2.0 Vp-p. These units provide two monitor outputs. The QUAD VIDEO OUT displays a continuous quad display or a digitally-zoomed frozen screen. The VIDEO OUT displays the quad presentation or any of the four video outputs full screen. The VIDEO OUT also displays a numeric on-screen camera identifier. Automatic gain and level circuits provide balanced brightness and contrast in all quadrants. The TC8276 Series achieve a real time update rate (30 frames-per-second) when used with line-locked cameras that have a phase error of less than 5 degrees.

Front panel controls allow manual operation for full screen video or four quadrant display on the monitor. These displays can be sequenced at a fixed two second dwell. If selected, the quad display can be included in the sequence.

Alarm contacts enable remote call up of any of the four camera inputs on the VIDEO OUT monitor, and freeze the quadrants on the QUAD VIDEO OUT monitor. Flashing on screen "ALARM" indicates cameras in alarm.



An alarm output is provided for control of a VCR or other alarm activated devices. Front panel push buttons "freeze" the current picture in any quadrant for further inspection. Flashing on-screen indicators identify frozen quads. The frozen quadrant can be "zoomed" to a full screen display.

## Specifications

### Electrical

Model No.	Rated Voltage	Voltage Range	Nominal Power <sup>1</sup>
TC8276	120 VAC, 50/60 Hz	105 to 130	9 W
TC8276X	220-240 VAC, 50/60 Hz	198 to 264	9 W

1. At rated voltage.

**Synchronization:** No external synchronization required.

TC8276: 525 line, 60 Hz. EIA RS-170, NTSC system compatible.

TC8276X: 625 line, 50 Hz. CCIR, PAL system compatible.

**Digital Memory:** 8 bit, 256 grey steps.

TC8276: 512 H x 484 V.

TC8276X: 512 H x 576 V.

### Controls & Indicators:

**FULL VIEW:** Four push buttons with LEDs. Select full screen presentation of inputs 1, 2, 3, or 4.

**FREEZE:** Four push buttons with LEDs. Freeze quadrants 1, 2, 3, or 4. Flashing on-screen indicator (FRZ) identifies frozen quads.

**QUAD:** One push button with LED. Selects quad display of inputs 1, 2, 3, and 4.

**SEQUENCE:** One push button. Starts/Stops full screen sequencing. Corresponding full-view camera LED will light.



International Standards Organization  
Registered Firm ISO 9001 Quality System



## Connectors:

**VIDEO INPUTS:** Eight looping BNCs with HiZ/75  $\Omega$  switches. Accepts 0.5 Vp-p to 2.0 Vp-p composite video, sync negative, 2:1 interlaced.

**VIDEO OUTPUTS:** Two. 75  $\Omega$ . BNC:

**QUAD VIDEO OUT:** Continuous quad presentation of the four inputs, or a digitally zoomed quadrant. Inputs are blanked to alert operator to absence of video.

**VIDEO OUT:** The quad presentation, or any one of four video inputs, full-screen, controlled via front panel and/or over-riding full-screen alarmed input(s).

**ALARM/ACCESSORY Input/Output:** 15-pin connector.

**ALARM INPUTS:** Four. Accepts momentary or continuous closures to ground.

**ALARM OUTPUT:** Isolated relay, normally open contacts, closes upon alarm input. The relay contacts can handle up to 0.5 A at 20 VAC/VDC (up to 36 volts peak from either pin of relay to ground), and a maximum resistive load of 10 VA.

**REMOTE CONTROL INPUT:** Accepts contact closures to provide remote control of quad display and the freeze function.

**VIDEO LOSS OUTPUT:** Logic level low on video loss.

**Power Cord:** 3-wire with grounded plug; 1.8 m (6 ft).

TC8276: NEMA 5-15P/C22.2, No. 42 plug.

TC8276X: CEE 7/7 plug.

## Mechanical

**Construction:** Steel chassis with sheet metal cover and plastic bezel.

**Finish:** Dark plum-colored case and front panel with medium plum keys.

**Dimensions:** Height: 1 standard rack unit; width: 1/2 standard rack unit.

223 W x 362 D x 40 H mm (8.77 x 14.25 x 1.59 in).

**Weight:** 2 kg (4.5 lb).

## Environmental

### Temperature:

Operating: 0 °C to +40 °C (32 °F to +104 °F).

Storage: -40 °C to +60 °C (-40 °F to +140 °F).

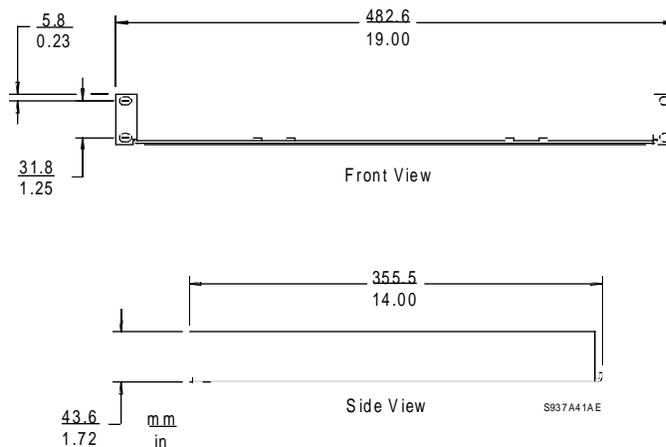
**Humidity:** 10% to 90% relative, noncondensing.

**Vibration:** 3 g swept sine wave, 15 Hz to 2000 Hz.

**Shock:** 50 g, 11 ms, 1/2 sine.

## Options

**TC8101MK Rack Kit:** For mounting one or two units in an EIA 19-inch rack.



**Rack Kit**

**Complies with the limits for a Class B digital device pursuant to part 15 of the FCC Rules and ICES-003 of Industry Canada.**

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