EXSS-100

Automatic Video Target Tracking System

Characteristics

Parameter	Value
Target tracking mode	Correlation
Input video resolution	720*576 pixels
Picture in picture displaying video resolution	298*223 pixels
Maximum tracking target size	200*200 pixels
Minimum tracking target size	40*40 pixels
Minimum step for target acquisition window size, controlled by user	One pixel in vertical and horizontal direction
Maximum between-frame target displacement	Up to ±50 pixels in vertical and horizontal directions
Input video signal standard	PAL
Number of video inputs	2
Target coordinate refine rate	50 Hz (one independent solution for every half-frame)
Target coordinate latency	No more, than 10 ms from the moment of accepting half-frame
Target coordinate subpixel accuracy	1/10 pixel
Input voltage	5-20 V
Power consumption	No more, than 6.5 W
External communication interface	RS232,115200 bps, 8N1
Weight	Less than 55 gram
Dimensions	100 x 65 x 20 mm

CHALLENGER
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Description

Automatic video target tracking system EXSS -100 is intended for use in applications, like gyro stabilized gimbals, where automatic tracking and holding target is required. EXSS -100 provide screen target coordinate with very low latency, and for every semi-frame of input PAL video signal, allowing tracking highly dynamical targets. The user can control target acquisition window size, independently in X and Y directions, which is suitable for most applications. The external communication protocol is very simple, that allow end user to integrate this tracking system to any equipment. EXSS -100 provide reliable tracking for many types of video source, like daylight video camera, or even IR imager. It has user-controllable settings of video processing algorithm, allow end user to fine tune the tracking performance for video source.