PeSCo

PEDESTRIAN SAFETY

C-DAC Pedestrian Safety Enhancement Controller

Presently available pedestrian signal controllers, in general, are designed for the walking speed of normal pedestrians. But, these days, a considerable number of 'divyang' (persons with disability) also use the motorway. The C-DAC developed Pedestrian Safety Enhancement Controller, PeSCo, is capable of identifying pedestrian demands through various input devices such as Pushbutton Switch, RFID and Ultrasonic Sensor for providing them sufficient crossing time based on the input device detected. PeSCo also guides the pedestrians through different tones to (1) locate the pedestrian crossing (2) wait for green signal (3) walk through green signal and (4) do not enter the motorway when the green signal is about to terminate. Crossing time available for normal pedestrians and divyang with different degree of disability will be different. The pedestrian safety enhancement controller is most useful at mid-block crossings in front of hospitals, markets, schools etc.

SALIENT FEATURES

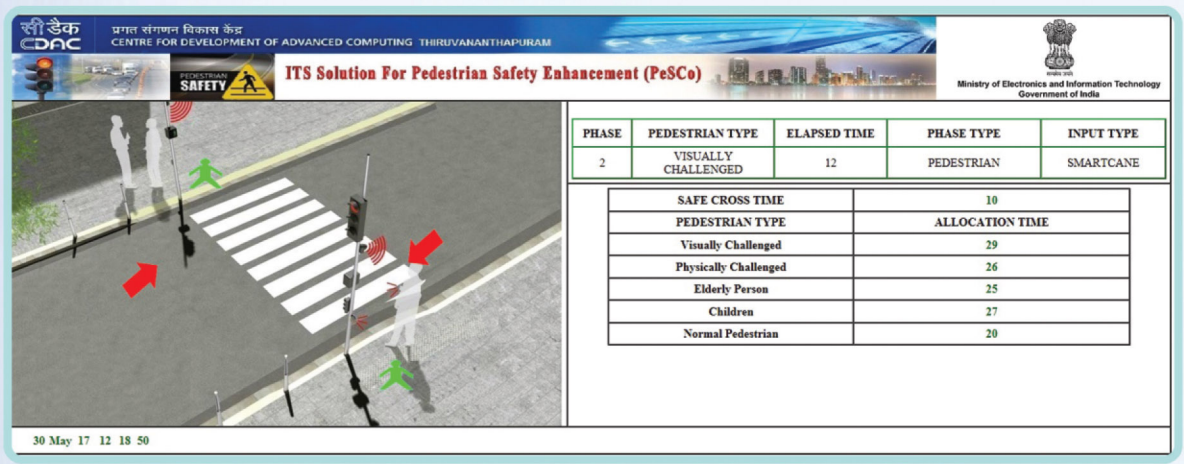
CPU	: 32 bit ARM® Cortex-A8 Processor
Memory	: RAM DDR3-(512MB) Flash (4GB) External Memory: SD Card 2GB
Operating System	: Linux
Real Time Clock (RTC)	: On-board RTC with 10Year Battery Backup
RTC Update	: Through GPS
Categories of pedestrian supported	: Visually challenged – with smart cane Visually challenged – with RF ID Tag Physically challenged – with RF ID Tag Children– with RF ID Tag Any Pedestrian – Push Button Press
Pedestrian Detection Inputs	: Push Button Switch, RFID Reader and Ultrasonic Sensor
RF ID card Supported	: 125 KHz with EM4102 protocol
Smart cane supported	: Any smart cane with 40 KHz ultrasonic pulse
Pedestrian Tone Types	: Locater, Wait, Safe Cross and Alert
Tone Base frequency	: 2 kHz
Tone Volume Level	: Variable from 0 to 5 dB
Tone output device	: Horn Speaker (8 Ohms 30W power)
Labelling for visually challenged	: By Braille Labels
Implementation scenarios	: Midblock -2 Pedestrian Sensor Box (PSB) : Staggered crossing -4 PSB

PSB to PSB communication	: Wireless 2.4GHz / CAN interface
Central Server Connectivity	: 10/100Mbps RJ45 Ethernet port
Programming Facility	: Using webserver
Firmware update	: RJ45 Ethernet port and JTAG
Data logging	: Local controller as file
Programmable Parameters	: Pedestrian categories Vs Walk time
	RF ID card No Vs Pedestrian categories
	Pedestrian Safe walk time
	Start Amber, All Red and Amber time
	Phase, Cycle Plan, Day plan and Week Plan

19.5 inch x 11.6 inch
PeSCo Controller

OPERATING ENVIRONMENT

Operating Voltage	: 24 V DC +/- 10%
Controller Mounting	: Pedestal / Pole
Temperature	: 0°C to +55° C
Relative Humidity	: 95% RH Non- condensing at +40 degree C



Web Interface for PeSCo

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