Matrix Comsec

Marketing Communication

An Innovative Approach of Multispectral Sensor in Biometric Authentication

Time-Attendance and Access Control have grown into a mainstream product and it is gaining significant growth in the market. Security issues pertaining to control access is a prime concern and a strenuous challenge in various sectors like Manufacturing Units, Airports, Defense, R & D Center, Nuclear Stations, Manufacturing Units, Mining Industries, Construction Sites, Chemical Industries, Transportation, Education, Healthcare, Club, etc.

Access Control is a matter of who, when, and where. It is the access control system that determines who is to be allowed to enter or exit, when they can exit or enter, and where they can exit or enter. Historically, the problem that has been most prevalent when it came to protecting access control points whether they are digital access points or physical access points has been the ability of the configured door lock. Moreover, issues such as counterfeit and even swipe information were faced in the traditional security systems. Biometrics has put up a road block to unauthorized users that have used some of the "tricks of the trade" to gain access.

Nowadays, information can be authenticated in different ways. It can be in the form of credentials that user knows such as, a PIN, password, etc. Second can be in the form of something that a user has it and needs to carry for authentication process such as, RFID Cards or a key fob with built-in authentication feature, etc. Third, the most powerful identification method is something that is unique to each user, their biometric credentials. These biometric credentials can be in the form of iris recognition, palm vein reader, multispectral biometric fingerprint, finger scanning, palm vein ID, facial recognition, voice recognition and more.

The advanced technologies such as facial recognition and voice recognition are not much preferred. The face recognition technology sometime doesn't work due to poor lighting effects, sunglasses, long/short hair, partially covered face, big smile on the face and more. Moreover, due to throat infection there are various issues identified in the voice recognition system.

Biometric fingerprint credential offers high level identification security. The good thing about using biometric devices for identification is that modern systems are built and designed to be convenient and safe to use. These devices have proven to be quite efficient in enhancing security. But at some places such as mines, chemical industries, education, nuclear stations and companies with manufacturing units or remote locations having extreme weather condition, the issues of fingerprint identification are experienced.

A new concept of advanced Multispectral Biometric Attendance System needs to be adopted to overcome such issues. With its high-performance technology, it reads two layers of a user's finger - the surface and subsurface. It scans the multiple wavelength which gives clearer image quality of fingerprint than that in conventional system.

By scanning multiple wavelengths, multispectral fingerprint controller reads surface and subsurface of a fingerprint. With an aim of overcoming hindrances posed by existing fingerprint identification systems scanning a single layer of the skin, multispectral fingerprint device is designed to deliver superior performance. It gives accurate image (s) even when the finger surface features are difficult to read due to dirt, usage, age or tough environmental conditions.

The identification by multispectral fingerprint door controller is extremely quick, which is another advantage it has over other tradition security methods and advanced features of iris recognition and face recognition. By using lumidigm biometric fingerprint scanner, user can be identified or rejected in a matter of seconds.

Multispectral imaging is a reliable biometric identification breakthrough that is able to provide strong protection against fingerprint spoofing techniques. It offers significantly lower False Acceptance Ratio (FAR) and False Rejection Ratio (FRR), making it ideal for both – high security and harsh industrial applications. This unique identification process

outperforms all other fingerprint scanners and offers robust and reliable biometric information of the user.

Hence, installing an advanced multispectral fingerprint door controller provides secure, convenient, and reliable solutions.

CONTACT US

Head Office: 394‑GIDC, Makarpura, Vadodara‑390010, India

Ph.: +91 265 2630555

E‑Mail: More@MatrixComSec.com

Website: www.MatrixAccessControl.com

About Matrix

Established in 1991, Matrix is a leader in Telecom and Security solutions for modern businesses and enterprises. Matrix, an innovative, technology driven and customer focused organization, is committed to keep pace with the revolutions in the telecom and security industries. With more than 40% of its human resources dedicated to the development of new products, Matrix has launched cutting‑edge products like IP‑PBX, Universal Gateways, VoIP Gateways and Terminals, GSM Gateways, Access Control, Time‑Attendance and Video Surveillance solutions. These solutions are feature‑rich, reliable and conform to the international standards. Having global footprints in Asia, Europe, North America, South America and Africa through an extensive network of more than 1000 channel partners, Matrix ensures that the products serve the needs of its customers faster and longer. Matrix has gained trust and admiration of customers representing the entire spectrum of industries. Matrix has won many international awards for its innovative products.