VLATACOM - A reliable partner

The Vlatacom Rural Biometric Unit is an efficient solution for data collection and on-site issuance of personalised documents. Its information security characteristics, rugged construction, autonomy features, and versatile communication options make it an ideal system for use in rural and inaccessible areas.

Vlatacom's experience

Since its establishment in 1997, Vlatacom has delivered numerous solutions to a multitude of clients. Vlatacom's policy is to continuously improve the professional skills and knowledge of its employees. This provides Vlatacom with the ability to successfully and professionally integrate complex solutions in the areas of information and communication technologies, biometrics, security, and telecommunications.

Customised solutions

Vlatacom provides the essential strategies, technology, processes, and personnel to optimise solutions in accordance with your specific requirements and demands. Simple integration of our solutions into existing systems gives you the opportunity to always keep the entire solution under complete control.
Provided solutions are customisable to features of local culture (language, alphabet).

SYSTEM CERTIFICATION
ISO 9001
SGS

SYSTEM CERTIFICATION
ISO/IEC 27001
SGS

Research and Development Center
VLATACOM

vRBU

eGovernance

# vRBU - Vlatacom Rural Biometric Unit

Introduction

The Vlatacom Rural Biometric Unit is an integral element of the Vlatacom smart card issuance information system. This unit is a mobile, rugged biometric system designed for applicant registration (enrolment) and on-site document personalisation and issuance in rural localities. The integrated communication module enables a connection to the system centre for the purposes of applicant identity verification, registry updating, and checks against watch lists. Identity verification is based on the most reliable verification method available, namely, the use of biometric modalities (in this case, an individual's fingerprints). The system also includes a module that can verify previously issued documents.
The unit is best suited for application in distant and inaccessible rural settlements where the placement of permanent installations and their necessary personnel are not feasible or practicable for governments. Furthermore, the system offers an ideal solution for the issuance of biometric documents to members of nomadic populations (those citizens lacking a permanent residence).
A rugged construction allows the unit to be mounted on a range of transportation means such as an all-terrain vehicle (ATV), boat, etc.

For All Weather Conditions and Terrains

The main advantage of the vRBU is the fact that it is designed for use in all weather conditions and a variety of terrains. In addition, the protective unit cases can be transported by any means of conveyance. One option, well-suited for distant and rural settlements, is to mount the equipment case on an ATV. Some features of this usage scenario include:
- The equipment, mounted within its detachable rear casing, is rugged and specially designed for heavy-duty use.
- The cases are mounted on an ATV employing a double military-grade suspension system.
- The system can accommodate various communication options including HF radio, TETRA, GSM, etc.
- The cases can be mounted on a powerful utility ATV featuring four-wheel drive, top-notch ergonomics, a powerful engine, and a suspension that is ready to climb over nearly all obstacles.

Information System Center

HF Radio, TETRA, GSM, etc.

vRBU unit vRBU unit vRBU unit vRBU unit
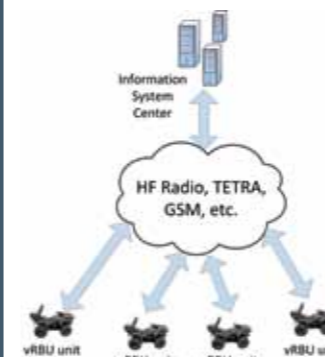
vRBU unit mobility is made possible by an array of supported radio technologies (HF radio, TETRA, GSM) that provide data connectivity with the information system centre.

Autonomy Features

The vRBU is designed to be an autonomous biometric unit featuring excellent field performance characteristics. The main attributes that enable unit autonomy include:
- The detachable unit cases are IP67 rated and thus suitable for various forms of transportation.
- Versatile power charging options include grid power, the vehicle's alternator, and solar panels.
- An internal battery provides up to 200Ah for 12h of standalone operation (maximum).
- An optional 125W HF radio enables data and voice communication with the system's data centre and other units hundreds of kilometres away.
- Up to 500 smart cards can be printed and issued without any additional supplies needed.
- An optional high fuel economy ATV provides an extended service range.
- Optional equipment: a shelter that covers/protects the entire unit, first-aid kit, sleeping bags, etc.

Key Features

The vRBU is a concept that integrates biometric enrolment, identity verification, and card personalisation equipment within a rugged mobile unit casing. The main unit features include:
- An all-in-one solution for biometric enrolment, biometric verification, and personalisation of regular and smart card documents.
- Various communication options (including HF radio) provide a connection to central registries in order to perform remote queries of applicant biometric and demographic data.
- Highly rugged equipment that can operate in a variety of terrains and weather conditions.
- Rapid deployment and high mobility along with top-notch, military-grade shock absorption (included in the ATV option).
- Detachable unit cases for standalone system use.
- Versatile power options: grid power/vehicle alternator/solar panel/internal battery with high autonomy.
-Optional equipment: toolkit, shelter items, first-aid kit, sleeping bags, etc.

Vlatacom Smart Card Information System Center

The vRBU back-end center is a central component of the Vlatacom smart card issuance information system. In addition to the vRBU back-end, this system consists of a number of mobile, remote vRBU units and, optionally, communication infrastructure along with stationary and mobile biometric units.
The back-end, in addition to maintaining a registry of document applicant identities, also enables vRBU units to perform remote enrolment (registration) and on-site document personalisation. Servers and applications perform biometric checks on new applicants and report the results to the remote vRBUs. The back-end's identity management module enables remote searches, checks, and examinations of records within the applicant registry.
The Automated Biometric Identification System (ABIS) is used to perform applicant identity checks. Due to its reliability and widespread distribution, ABIS typically uses fingerprints as the biometric modality of choice. The related Automated Fingerprint Identification System (AFIS) is a highly specialised biometric identification system that compares input fingerprints with fingerprint records from the applicant registry.
The vRBU back-end also features a network management function that enables system operation using either of the following options: HF radio, TETRA, or a GSM network. System security is based on secured, tunneled communications along with eID technologies.

All vRBU back-end components are redundant, and the system uses the most modern concepts of information security and protection. In this way, system availability, reliability, and security are assured.

vRBU Key Equipment Features

- Laptop computer: Rugged, with a 13" touchscreen, MIL-STD, IP65 certified
- Fingerprint scanner:500 dpi, tenprint, FBI approved
- Camera: 3.0 Mpx HD webcam, autofocus, USB 2.0
- Communications: up to 125W HF radio, with STANAG data transfer (optionally, TETRA or GSM terminals can be supplied)
- Signature pad: 600 dpi, 256 pressure levels, 1x5" window size
- Smart card printer: 600 dpi, full-colour, contact and contactless smart card (ISO 7810/14443) personalisation
- Cases: IP67, detachable, heavy-duty, with wheels and handles
- ATV: 4x4, power steering, heavy-duty

Highly rugged equipment that can operate in a wide variety of terrains and weather conditions.

Rapid deployment and high mobility with top-notch, military-grade shock absorption (included in the ATV option).