# iklas

#### Electronic Key Management System (up to 24 keys)

#### **About IKLAS**

iKLAS (Intelligent Key Lock Application System) is an embedded web-based key management system that controls
 and tracks the movement of keys in buildings and facilities to ensure that security will not be compromised.
 Without requiring continual manual monitoring, iKLAS is easy to maintain and built with quality materials to



withstand damage due to regular use or tampering. Our Key Management System (KMS) provides highly secured monitoring and control of information over the Wide Area Network (WAN). iKLAS is user-friendly and suitable for use in a wide field of sectors, including banking, education, entertainment, government, healthcare and retail industry etc.

#### **Key Benefits**

- Enhance accountability & security
- Eliminate manual recording/tracking
- Increased productivity
- Centralized auditing and monitoring
- Efficient tracking of keys

#### **Key Features**

- Built- in color camera for security and verification upon access
- Built- in SMS / Email alarm triggers and warnings (optional)
- Built in Auto Tag return Function
- Reader to support different access modes, including cards (Mifare, HID, CEPAS, SSID etc), user ID + PIN, or by fingerprint
- Up to 10 different RFID key tag (encrypted) colours for easy differentiation
- Embedded Key Management Software
- Live key status update
- Manual bypass in case of system breakdown
- Tamper proof key rings / seals with unique serial number
- Up to 5,000 users, 320 key groups, 64 time schedules, 20,000 transactions & 100,000 user photo images

# **Technical Specifications (Hardware)**

#### Controller

CPU	<ul> <li>ARM9 Series Micro-Processor</li> <li>ARM* High-performance 64-bit Instruction Set, 32-bit Instruction Set</li> <li>Thumb* High Code Density 16-bit Instruction Set</li> <li>200 MIPS at 180 MHz, Memory Management Unit</li> <li>16KB Data Cache, 16KB Instruction Cache, Write Buffer</li> <li>Additional Embedded Memory</li> <li>16KB of SRAM and 128KB of ROM</li> <li>System Peripherals for Enhanced Performance</li> <li>Enhanced Clock Generator and Power Management Controller</li> <li>System Timer Including Periodic Interrupt, Watchdog and Second Counter</li> <li>Real-time Clock with Alarm Interrupt</li> <li>Ethernet MAC 10/100 Base-T</li> <li>USB 2.0 Full Speed (12 Mbits per second) Device Port</li> <li>Four Universal Synchronous / Asynchronous Receiver / Transmitters (USART)</li> </ul>
Memory	<ul> <li>On Board</li> <li>NOR FLASH: 2MB</li> <li>NAND FLASH: 32MB</li> <li>SD Card: 8G portable card socket</li> </ul>
Time Clock	<ul> <li>Battery Back-up Real Time Clock</li> <li>Permanent Calendar (Second, Hour, Day, Month, Year)</li> </ul>

#### **Operation Panel**

Keypad	<ul> <li>High resolution quality silicone rubber keys</li> <li>0-9 ten numeric keys; [&amp;] and [#] keys represent <i>return</i> and <i>enter</i></li> <li>4 function keys placed below the LCD window correspond to the dynamic icons displayed on the LCD</li> <li>Beeper integrated</li> </ul>	
LCD Display	<ul> <li>High resolution LCD; ASCII font: 16 characters x 4 rows; Chinese font: 8 characters x 4 rows</li> <li>Classic white backlight</li> <li>User-friendly GUI; Dynamic cursor position follows user input; highlight with inverse background and font colour; multiple selections with up, down, left, right keys</li> </ul>	
Card Reader	<ul> <li>Standard &gt; MIFARE Proximity Card</li> <li>Optional &gt; HID Proximity Card, EM Proximity Card, CEPAS Proximity Card, Fingerprint, Fingerprint + Proximity Card or Connect any third party 32-bit Card ID reader with wiegand port</li> </ul>	
Integrated Camera	<ul> <li>Capture user photo image</li> <li>Wide-angle lens</li> </ul>	
GSM Modem (optional)	<ul> <li>Dual band - GSM900/1800</li> <li>SMS notification to up to 5 mobile numbers when alarm or system failure occurs</li> <li>SMS reminder to user when withdrawn key time expires (up to 3 times per key expiry)</li> </ul>	

#### **Cabinet Key Positions**

Cabinet	<ul> <li>Key-slots capacities <ul> <li>12 keys; 18 keys; 24 keys; 36 keys; 48 keys; 54 keys; 60 keys; 66 keys; 72 keys; 84 keys; 96 keys; 108 keys; 132 keys</li> </ul> </li> <li>Security Guarantee <ul> <li>Body: 1.5 mm steel plate</li> <li>Fail-secure: In the event of power down, keys will be locked in position to prevent unauthorised withdrawal.</li> <li>Key-cabinet door: tamper-proof window; electric solenoid (power off to lock); door sensor</li> <li>Master key for emergency release of all keys</li> <li>3-colour LEDs indicate the key-position status</li> <li>Epoxy Powder Coating</li> </ul> </li> </ul>	
System Capacities	<ul> <li>5,000 users &amp; manage up to 5,280 keys</li> <li>320 general key groups and 64 multi-user access groups</li> <li>64 time schedules; 20,000 transactions &amp; 100,000 user photo images</li> </ul>	
Power Supply	<ul> <li>Power supply unit: 12Vdc + 15%; Battery: 12V Lead Acid Battery</li> <li>Power-down detector &amp; battery auto cut-in</li> <li>System battery backup: standby mode ≤ 8hrs; operating mode ≤ 120 transactions</li> </ul>	

## **Technical Specifications (Software)**

- Embedded Linux OS, application software and database
- · Web-based platform for system configuration, monitoring & management
- Centralised Management System (optional)
- Highly secured multiple user logins
- Real time key status update
- Remote configuration and monitoring of the system
- Fraud management with audit trail
- Report-generator for specific reports
- Automatic or predefined upload and download of information through network

Note: SDK/TCP/IP interface are available for integration

#### **Keypad Access Rights**

Admin	<ul> <li>Authorise to reset users' personal pins</li> <li>Edit system</li> <li>&gt;Edit TCP/IP address</li> <li>Withdraw &amp; return any key</li> <li>Track any withdrawn key details</li> <li>&gt; User name or ID</li> <li>&gt; User contact number</li> </ul>	
User	<ul> <li>Change personal pin</li> <li>System check</li> <li>Check TCP/IP address</li> <li>Withdraw &amp; return the assigned key</li> <li>Track any withdrawn key that is not available</li> <li>User name or ID</li> <li>User contact number</li> </ul>	

#### Web Access Rights

Super Admin	<ul> <li>Add/edit/remove users &amp; keys</li> <li>Configure/edit system &amp; box information</li> <li>Change super admin login password</li> <li>Configure system time, date, IP address, key withdraw/return mode etc</li> </ul>
Admin	<ul> <li>Check key status; check/print records</li> <li>Add/edit/remove users; edit key information</li> <li>Add/edit/remove general key groups and multi-user access groups</li> <li>Add/edit/remove general schedules</li> <li>Edit system         <ul> <li>Upload &amp; download database &amp; record</li> </ul> </li> </ul>
User	User • Check/print personal information • Change personal password • Check grouping & scheduling settings

#### Certificate

CE Compliance	Reference File No - ACI-2012377
Standards Compliance	EN 55022:2006+A1:2007 (CISPR 22:2005+A1:2006), EN 61000-3-2:2005+A1:2008 (IEC 61000-3-3:2008) EN 55024:1998 + A1:2001+A2:2003 (CISPR24:1997+A1:2001+A2:2002) IEC 61000-4-2:2008, IEC 61000-4-3:2010, IEC 61000-4-4:2004+A1:2010, IEC 61000-4-5:2005, IEC 61000-4-6:2008, IEC 61000-4-8:2009, IEC 61000-4-11:2004

### **Technical Specifications**



	iKLAS-R6/12/18/24
Input Voltage	110/240VAC
Maximum Input Current	1.6A/115Vac, 1A/230Vac
Frequency	50/60Hz
Back-Up Battery	12V/7Ah
Standby in battery mode	≤ 8Hrs
Operating in battery mode	≤ 120 Transactions
Operating Temperature	10°c to 40°c
Humidity	<95%
Size	(W) 600mm (H) 410mm (D) 230mm
Weight	25KG
Max. Number of Key Slots	24 key slots per cabinet (4 rows of 6)
Operating Systems	Windows XP/Vista; Windows 7/8; Linux
Interface	TCP/IP

# BrightNet

BrightNet ID System Sdn Bhd Company No. (803671-X)

31-2A, Jalan PJU 1/3D, Sunwaymas Commercial Centre, 47301 Petaling Jaya, Selangor, Malaysia. Tel : +603-78030727 info@brightnet.com.my

www.brightnet.com.my www.brightnet.my

\*All brands and product names are trademarks or registered trademarks of their respective owners. Specifications are subjected to change without notice.