

# CYBERSECURITY IN SCHILLER PRODUCTS

Data security through the continuum of care

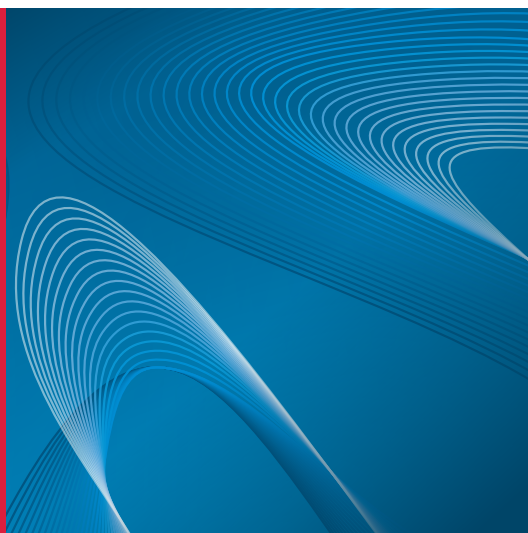


**SCHILLER**  
The Art of Diagnostics

# CYBERSECURITY IN SCHILLER PRODUCTS

SCHILLER devices are cybersecure thanks to these features:

- Role-based access control
- Patient identification features: worklist/orders, barcode, PDQ
- Directory Services integration via LDAP with audit logging
- Encrypted data transmission
- WPA2 enterprise WiFi protocol



SCHILLER ECG devices are professionally penetration-tested to ensure they are safe from malicious attacks.

The latest generation of SCHILLER resting ECG devices is equipped with high-end security features. Devices are professionally penetration tested to ensure protection against cyber attacks. Security is ensured by using a customized, security-hardened Linux kernel. This ensures that patient data is secure from unauthorised access, while supporting compliance with hospital IT data policies and the GDPR law.

## PATIENT DATA PROTECTED FROM UNAUTHORIZED USERS

Access control level can be configured from "none" to "advanced".

- Users log in with a personal user name and password.
- Roles can be assigned to control access to patient data and configuration settings.
- User accounts are either managed remotely on the SCHILLER Server, linked to Directory Services with LDAP via SCHILLER Server, or on each ECG device in the settings.

- Users are automatically logged off after a specified period of inactivity.
- If user management is not active, the device can still be password protected.

## EASY TROUBLESHOOTING

SCHILLER Server, clinical software applications and medical devices hold comprehensive audit and security logs. This ensures that user and data activity on the device is logged.

## GUARANTEE DATA INTEGRITY

Identifying the patient correctly and easily is vital. DICOM worklist and HL7 orders can be used for patient identification. The PDQ feature allows fast patient query and simplifies the daily hospital routine. 1D and 2D barcode scanners are supported.

SCHILLER devices support mandatory fields during data entry, if required.

These tools help drastically reduce patient demographic errors. SCHILLER Server also provides integrity and correlation checking for an added layer of protection.

## ENSURE DATA SECURITY

Data transmitted to and from SCHILLER devices is encrypted using SSL/TLS.

SCHILLER uses hospital-standard and secure WiFi protocols such as WPA2 enterprise with certificate-based authentication.

Recorded data can be automatically deleted on the device after successful transmission to SEMA and/or HIS.

## ROLE-BASED ACCESS CONTROL

With advanced user access control, SCHILLER ensures that only authorised personnel can access a device.



Users log in with a personal user name and password. Roles are assigned to users for access to the memory and settings.



User accounts are either managed remotely on the SCHILLER Server, linked to Directory Services with LDAP via SCHILLER Server, or on each ECG device in the settings.



Users are automatically logged off after a specified period of inactivity.

## LDAP INTEGRATION

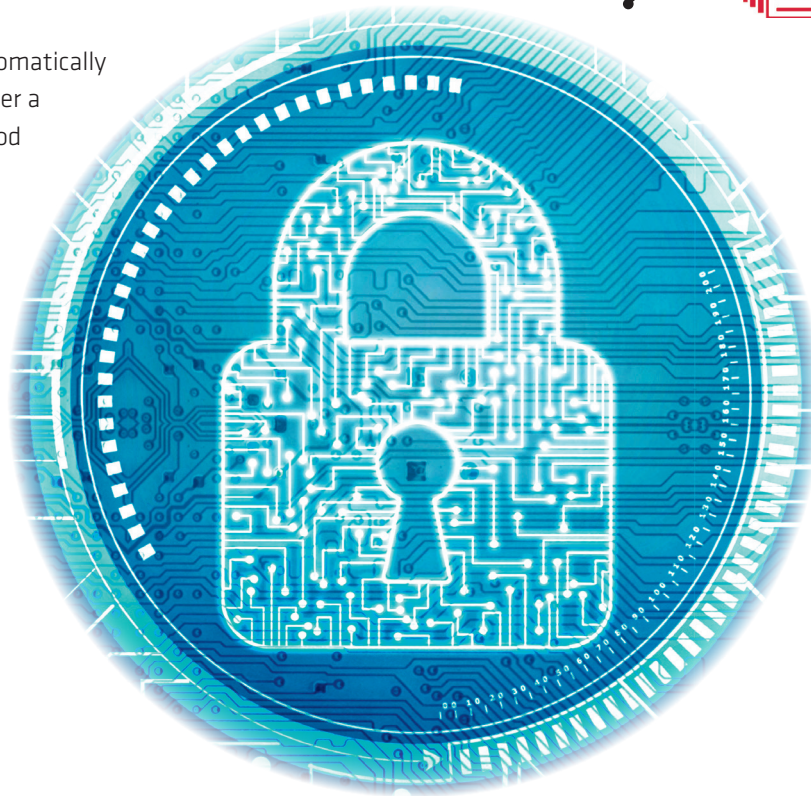


SCHILLER medical devices can be integrated into the hospital's LDAP (e.g. Active Directory) for single sign-on user authentication.

## AUDIT LOGGING



SCHILLER Server, clinical software applications and medical devices hold comprehensive audit and security logs.



## PATIENT IDENTIFICATION

Features that drastically reduce patient demographic errors and expedite workflows:



DICOM worklist and HL7 orders, 1D and 2D barcode scanners.



Support of mandatory fields during manual data entry.



Fast patient query through PDQ simplifies daily hospital routine.

## SECURE DATA TRANSMISSION



Data transmitted to and from SCHILLER devices is encrypted using SSL/TLS.



Secure WiFi-protocols are incorporated, such as WPA2 enterprise with certificate-based authentication.



Recorded data can be automatically deleted on the device after successful transmission to SEMA and/or HIS.



**Americas**  
**SCHILLER Americas Inc.**  
 Doral, Florida 33172

**North America:**  
 Phone +1 786 845 06 20  
 Fax +1 786 845 06 02  
 sales@schilleramericas.com  
 www.schilleramericas.com

**Latin America & Caribbean**  
 Phone +1 305 591 11 21  
 Fax +1 786 845 06 02  
 sales@schilleramericas.com  
 www.schilleramericas.com



**Asia**  
**SCHILLER Asia-Pacific / Malaysia**  
 52200 Kuala Lumpur, Malaysia  
 Phone +603 6272 3033  
 sales@schiller.com.my  
 www.schiller-asia.com



**Austria**  
**SCHILLER Handelsgesellschaft m.b.H.**  
 A-4040 Linz  
 Phone +43 732 70 99 0  
 Fax +43 732 757 000  
 sales@schiller.at  
 www.schiller.at



**China**  
**Alfred Schiller (Beijing) Medical Equipment Co., Ltd.**  
 100015 Beijing, China  
 Phone +86 010 52007020  
 Fax +86 010 52007020-8016  
 info@schillerchina.com  
 www.schillermedical.cn



**Croatia**  
**SCHILLER d.o.o.**  
 10000 Zagreb  
 Phone +385 1 309 66 59  
 Fax +385 1 309 66 60  
 info@schillerzg.hr  
 www.schiller.hr



**France**  
**SCHILLER Médical**  
 F-67160 Wissembourg  
 Phone +33 3 88 63 36 00  
 Fax +33 3 88 63 36 49  
 info@schiller.fr  
 www.schiller.fr



**France (distribution France)**  
**SCHILLER France S.A.S.**  
 F-77608 Bussy St Georges  
 Phone +33 1 64 66 50 00  
 Fax +33 1 64 66 50 10  
 contact@schillerfrance.fr  
 www.schiller-france.com



**Germany**  
**SCHILLER Medizintechnik GmbH**  
 D-85622 Feldkirchen b. München  
 Phone +49 89 62 99 81 0  
 Fax +49 89 609 50 90  
 info@schillermed.de  
 www.schillermed.de



**India**  
**SCHILLER Healthcare India Pvt. Ltd.**  
 Mumbai - 400 059, India  
 Phone +91 22 6152 3333 / 2920 9141  
 Fax +91 22 2920 9142  
 sales@schillerindia.com  
 www.schillerindia.com



**Poland**  
**SCHILLER Poland Sp. z o.o.**  
 PL-02-729 Warszawa  
 Phone +48 22 843 20 89 / +48 22 647 35 90  
 Fax +48 22 843 20 89  
 schiller@schiller.pl  
 www.schiller.pl



**Russia & C.I.S.**  
**AO SCHILLER.RU**  
 119049 Moscow, Russia  
 Phone +7 (495) 970 11 33  
 mail@schiller.ru  
 www.schiller.ru



**Serbia**  
**SCHILLER d.o.o.**  
 11010 Beograd  
 Phone +381 11 39 79 508  
 Fax +381 11 39 79 518  
 info@schiller.rs  
 www.schiller.rs



**Slovenia**  
**SCHILLER d.o.o.**  
 2310 Slovenska Bistrica  
 Phone +386 2 843 00 56  
 Fax +386 2 843 00 57  
 info@schiller.si  
 www.schiller.si



**Spain**  
**SCHILLER ESPAÑA, S.A.**  
 ES-28232 Las Rozas/Madrid  
 Phone +34 91 713 01 76  
 Fax +34 91 355 79 33  
 schiller@schiller.es  
 www.schiller.es



**Switzerland**  
**SCHILLER-Reomed AG**  
 CH-8912 Obfelden  
 Phone +41 44 744 30 00  
 Fax +41 44 740 37 10  
 sales@schiller-reomed.ch  
 www.schiller-reomed.ch



**Turkey**  
**SCHILLER TÜRKIYE**  
 Okmeydani-Sisli - Istanbul  
 Phone +90 212 210 8681 (pbx)  
 Fax +90 212 210 8684  
 info@schiller.com.tr  
 www.schiller-turkiye.com



**United Kingdom**  
**SCHILLER UK Ltd.**  
 Anstruther, Fife KY10 3H  
 Phone +44 16 190 72 565  
 sales@schilleruk.com  
 www.schilleruk.com

Device availability in your market is subject to regulatory approval.

