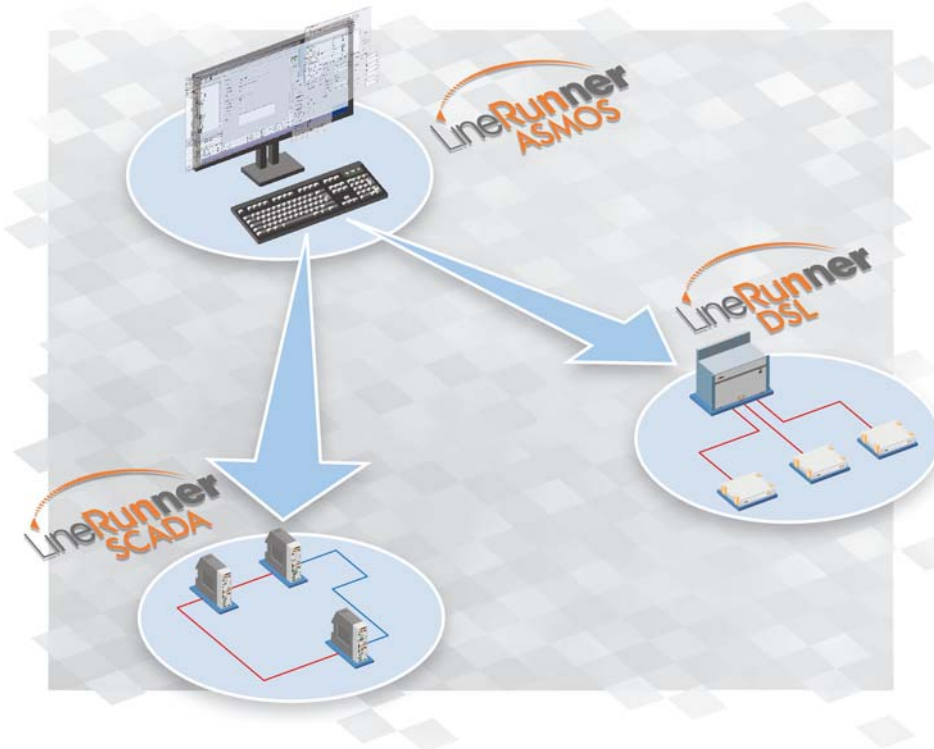# LineRunner ASMOS

## The management system for the LineRunner family



- One management system for the LineRunner system family and Datacom products

- Flexibility through interface versatility: IP network, modem, serial interface

- Integrated user administration

- Management boards: Service & Management Unit (SMU), Service & Diagnosis Unit (SDU)

- Client/server architecture

- Up to 10 remote clients per ASMOS Pro server

### What's the use of ASMOS?

The rapid development of the telecommunications market results in ever larger and more complex transmission networks.

A growing number of systems to be monitored with more and more functions means increasing demands to the operator concerning monitoring and configuration.

The quality of services should be able to be accounted over a long period of time by the operator.

A modern management system has tomatch these growing demands. Only if occurring tasks are accomplished fast and inexpensive your customer is satisfied and with higher cost-effectiveness your competitiveness is sustained.

ASMOS provides an all-in-one complete management for the LineRunner system family and Datacom products. Concentrate the management of all components in your LineRunner systems at a central location.

The coordinated interaction of hardware, firmware and ASMOS guarantees for highest effectivity during operation of your systems. LineRunner ASMOS fulfils all FCAPS requirements to a modern management system (FCAPS = Faults, Configuration, Accounting, Performance, Security).

## Fault management

ASMOS logs and saves all events and actions. Data can be exported and processed and evaluated in other applications (e.g. Microsoft Excel).

ASMOS displays all arising alarms in an alarm list. Whenever you select an alarm further characteristics of the associated board are displayed in a separate window. For further fault diagnosis you can perform tests from the PC like switching loops or checking transmitter or receiver.

## Configuration management

Modifications of a configuration can be carried out from a central site. If a system is updated with new hardware LineRunner ASMOS discovers all new components and registers them in its database.

## Alarm management

The operating data and fault reports of all boards are collected automatically by ASMOS and displayed concisely. With the freely selectable prioritisation of single reports you can easily adapt Sie ASMOS to your special conditions.

## Performance management

Measurements are taken at several points in LineRunner DSL systems to compile statistics on the performance of the system (G.826). The data is stored on the board at both 15-minutes as well as in 24-hours intervals.
Limits for each of the statistical variables can be stored on the board; an alarm is triggered when a limit is exceeded.
You can call up the statistics data per board and write them to the performance log file.

## Safety management

With the ASMOS security function activated different levels of authorization can be applied to the ASMOS users: Observer, operator, power operator and administrator. The authorizations range from merely monitoring to configuring to actually modifying authorizations.

## Configuration manager

LineRunner ASMOS allows the application of templates. Templates can be created centrally and saved under a descriptive name for demand. These templates can be employed by everyone even without deep system knowledge to set up new transmission systems easily and safely. The configuration files can be exported and printed out.
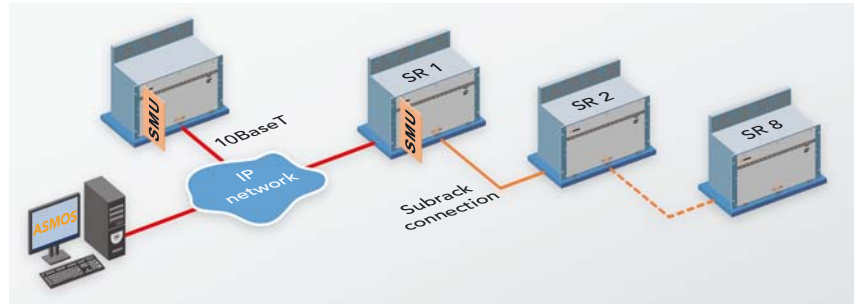
- Extensive configuration possibilities
- Fast access to all parameters
- Fast configuration with configuration files



Display of:
- Network structure
- Status
- Alarm list
- Line margin
- Line attenuation
- Bit error rate

Each board is delivered with standard configuration files. You can set any module to delivery state easily with it.

If required special reports in file format supply precise information on the module for fast problem solution with the aid of our hotline.

### ■ LineRunner ASMOS Pro

ASMOS Pro is the most powerful version of ASMOS. The client server concept allows for the separation of the database server and the ASMOS access PC. Hardware scalability together with a fast database management system (MySQL) increases the number of manageable systems explicitly. ASMOS Pro needs a separate licence every 2,000 links.

LineRunner ASMOS Pro is available as a multi client/server application. With it an ASMOS management system can be accessed from different locations via several ASMOS clients at the same time.

### ■ ASMOS CT (Craft Terminal)

The ASMOS Craft Terminal is the solution for local management.

A local PC that is connected via the serial interface (RS-232) of line cards or desktops provides direct access to the units - even without a SMU.

This provides all configuration possibilities, status polling and firmware download for the selected transmission route.

### ■ ASMOS hardware

According to the installation of your boards different management modules are employed.

☐ SMU: manages boards in the subracks SRS2, SRA2 and SRV

☐ SMU HL: for desktop LTs (You can connect up to 16 boards serially to the management PC)

### ■ LineRunner SMU (System Management Unit)

LineRunner SMU is the interface to ASMOS. The contact is provided using a standard network connection. Available is the access via:

☐ IP network (Ethernet)

☐ modem connection

☐ directly via the serial RS-232 interface

You can set up management connections in parallel to the payload data network.

Each SMU monitors up to 128 links. The SMU supports either the Qke protocol designed for LineRunner modules as well as SNMP. For SNMP connection of the modules the SMU operates as SNMP proxy agent.

### ■ LineRunner SDU (System Diagnosis Unit)

Using the SDU you can configure and monitor a fully equipped subrack. The management PC is connected with the SDU via a RS-232 interface. Here the configuration is performed exclusively via ASMOS.

The LineRunner SDU is available for the subracks SRS2, SRA2, SRV.

### ■ Further information

For further details on the different transmission systems and subracks please refer to the corresponding data sheets.

## Technical specifications

| Minimum system requirements for LineRunner ASMOS and ASMOS CT (Craft Terminal) | |
|---|---|
| Computer | IBM compatible PC |
| Processor | Intel Pentium III or AMD Athlon 1 GHz |
| Operating system | Windows 2003 Server (SP 1) |
| | Windows XP Professional (SP 2) |
| RAM | 256 MB (512 MB recommended) |
| Free hard disk capacity | 500 MB |
| **Minimum system requirements for LineRunner ASMOS Pro** | |
| Computer | IBM compatible PC |
| Processor | Intel Pentium 4 or AMD Athlon 2 GHz |
| Operating system | Windows 2003 Server (SP 1) |
| | Windows XP Professional (SP 2) |
| RAM | 512 MB (1 GB recommended) |
| Free hard disk capacity | 500 MB |
| **LineRunner Service & Management Unit (SMU)** | |
| Management protocols | Qke (via RS-232 or IP network), SNMP |
| Physical interfaces | IEEE802.3 (10BaseT); RS-232 |
| Number of manageable links | 128 |
| **LineRunner System Diagnosis Unit (SDU)** | |
| Management protocol | Qke (via RS-232) |
| Physical interfaces | RS-232 |
| Number of manageable links | 16 |

Looking for more information?
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or contact us: **info@keymile.com** ...