



DEHN + SÖHNE

# DEHN——基站的保护

DEHN protects Cell Sites.



# DEHN — 全球范围内提供防雷解决方案

## DEHN - Competence in Protection Solutions worldwide.

DEHN+SÖHNE公司经过90多年的发展，现有700多名专业人员，提供可靠、值得信赖的防雷和电涌保护设备。

DEHN+SÖHNE从事基站保护方面的工作已有25多年，正是由于DEHN+SÖHNE具有如此丰富的经验，使DEHN+SÖHNE现已成为在无线领域中接地、等电位连接、雷电和电涌保护器等设备的最重要供应商之一。

无线网络（GSM、UMTS/3G、W-CDMA、TETRA）的开发和安装需要详细的计划和组织过程，因而，从事这些方面项目工程的人员和公司

会遇到很多巨大的挑战。

当设计和安装基站时，保险公司和专家们告诫人们应将雷电和电涌保护作为保护生命和财产的最重要因素之一。

DEHN+SÖHNE在整个供应链中提供各项支持，包括对运营商、工程承包人、基站设备供应商以及电气承包人。这些强大的服务使DEHN+SÖHNE成为“全方位”的供应商。

当今，很多活跃在无线领域的著名公司都采用DEHN+SÖHNE的保护设备。

With over 700 professionals DEHN+SÖHNE has provided reliable and field-tested lightning and surge protection for more than 90 years now.

For more than 25 years DEHN+SÖHNE has been involved in the protection of cell sites. With this long experience DEHN+SÖHNE has become one of the most important suppliers of earthing, equipotential bonding, lightning and surge protection on the wireless market.

Developing and installing of wireless networks (GSM, UMTS/3G, W-CDMA, TETRA) requires detailed planning and a structured proceeding. Thus, everybody and every company involved encounters great challenges in these projects.



Insurances and experts request people in charge to consider lightning and surge protection one of the most important factors for protecting human beings and goods when designing and installing cell sites.

DEHN+SÖHNE offers support in the whole supply chain for operators, contractors, base station suppliers as well as electrical contractors. This powerful service allows DEHN+SÖHNE to be an "All-in-One" supplier.

Well-known companies operating on the wireless market rely on the know-how and protection devices of DEHN+SÖHNE.

# DEHN — 防雷和接地方面的专家

## DEHN – Expert in Lightning Protection and Earthing.

### DEHN接地器件

- ……满足最高的质量要求
- ……使用方便

### DEHN Components for Earthing

- ... fulfil highest quality requirements
- ... are easy to use

### DEHN等电位连接器件

- ……应用效果好
- ……使用方便

### DEHN Components for Equipotential Bonding

- ... are adapted to application
- ... allow flexibility

### DEHN外部防雷保护器件

- ……能够泄放最大能量的雷电流
- ……适合于建筑物和构筑物的设计

### DEHN Components for External Lightning Protection

- ... can handle highest lightning currents
- ... fit to the design of buildings and structures

使用HVI® 引下线保护尾部天线  
Lightning protection for rear antenna pole with HVI® conductor

HVI® 引下线的防雷保护  
Lightning protection with HVI® conductor



安装于屋顶的等电位连接排  
Equipotential bonding at a rooftop installation



连接于等电位排的天线杆  
Antenna pole connected to the equipotential bonding

连接于接地系统的屏蔽架  
Bonding of a shelter to the earthing system

带接地棒的地基  
Foundation with foundation earthing electrode

在绝缘管内的  
HVI® 引下线  
HVI® Conductor in  
insulating pipe  
货号: 819 321

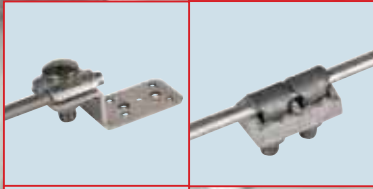
HVI® 引下线 I, II, III  
HVI® Conductor I, II, III  
货号: 829 020, 819 021, 819 022

天线竿夹具  
Pipe clamp for  
antennas  
货号: 540 100



KS连接器  
KS Connector  
货号: 302 000

支架  
Bracket  
货号: 377 100



屋顶安装的导线  
固定器类型FB2  
Roof conductor  
holder Type FB2  
货号: 253 050

DEHNsnap® 导线  
固定器  
Conductor holder  
货号: 204 006

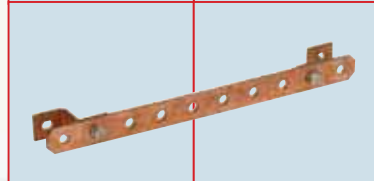
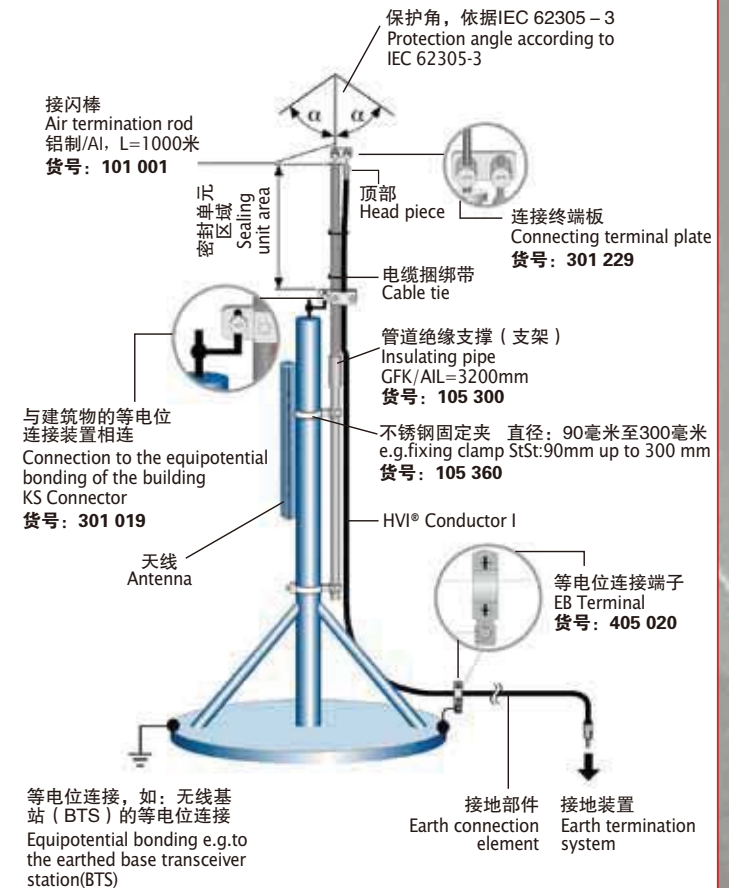


MV夹具  
MV Clamp  
货号: 390 050

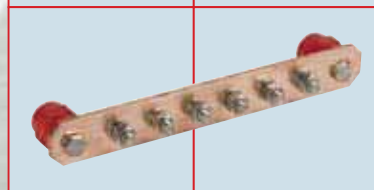
DEHNgrip® 导线  
固定器  
Conductor holder  
货号: 207 009



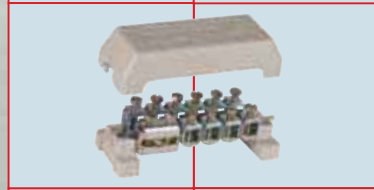
用于天线的隔离接闪装置, 配有耐高压的HVI线缆。  
Isolated lightning protection system with high-voltage  
insulated HVI® conductor for antenna systems



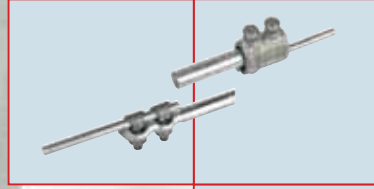
RF线缆接地汇流排  
Earthing busbar  
for RF cables  
货号: 472 257



接地汇流排 (可调的)  
Equipotential bonding bar  
(variable)  
货号: 472 207

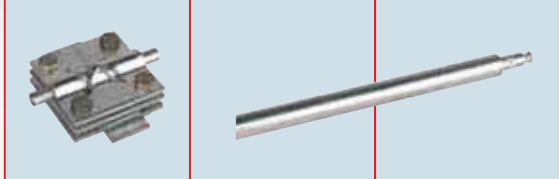


电源系统主接地汇流排  
Main equipotential bonding  
bar for power systems  
货号: 563 200



引入线接地棒  
Lead-in earthing rod  
货号: 480 150

夹具  
Cross unit  
货号: 321 045



DEHN接地棒  
DEHN Earth rod  
货号: 620 150



异型接地棒  
Profiled earth rod  
货号: 635 150

# 转移雷电的威胁 —— 供电系统的电涌保护器

## Avert Lightning Threat – Coordinated Surge Protection of your Power Supply.

DEHventil® modular  
货号: 951 310

用于TT和TN-S系统的模块式复合型雷电流/电涌保护器

Modular combined lightning current and surge arrester for TT and TN-S systems



DEHventil® modular  
货号: 951 315

用于TT和TN-S系统的模块式复合型雷电流/电涌保护器, 具有遥信装置

Modular combined lightning current and surge arrester for TT and TN-S systems with remote signalling

DEHventil® modular  
货号: 951 110

用于单相TT和TN系统的模块式复合型雷电流/电涌保护器

Modular combined lightning current and surge arrester for single-phase TT and TN systems



DEHventil® modular  
货号: 951 115

用于单相TT和TN系统的模块式复合型雷电流/电涌保护器, 具有遥信装置

Modular combined lightning current and surge arrester for single-phase TT and TN systems with remote signalling

DEHNbloc® Maxi  
货号: 900 025

能量协调的单极雷电流保护器, 具有高续流抑制能力

Coordinated lightning current arrester with high follow current limitation



DEHNgap® Maxi  
货号: 900 055

能量协调的N-PE雷电流保护器

Coordinated N-PE lightning current arrester

DEHNgap® modular  
货号: 952 115

用于单相230 V TT和TN系统的模块式电涌保护器

Modular surge arrester for single-phase 230V TT and TN systems



DEHNgap® modular  
货号: 952 315

用于TT和TN-S系统的模块式电涌保护器, 具有遥信装置

Modular surge arrester for TT and TN-S systems with remote signalling

**Red/Line**



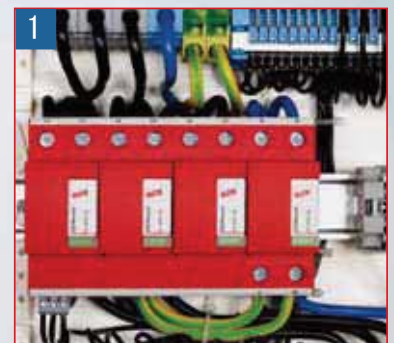
### DEHNventil® modular

- ……预接线，节省空间和成本
- ……采用RADAX-FLOW技术，将雷电和电涌保护集于一体
- ……使用模块释放按钮更换模块，操作简易
- ……满足最高保护要求
- ……减少熔丝动作的次数
- ……增加设备的可用性

### DEHNventil® modular

- ... saves space and costs due to prewired assembly
- ... combines lightning current and surge protection with RADAX-Flow Technology
- ... ensures easy exchanging of modules with module releasing button
- ... fullfils maximum protection requirements
- ... reduces false operation of fuses
- ... increases system availability

安装在配电柜中的DEHNventil® modular  
DEHNventil® modular in a power supply cabinet



### DEHN bloc® Maxi/DEHNgap Maxi

- ……确保开关柜的安全
- ……性价比高，能量协调的雷电保护器

### DEHNBloc® Maxi/DEHNgap Maxi

- ... safeguard meter cabinets
- ... provide cost-efficient, coordinated lightning current protection

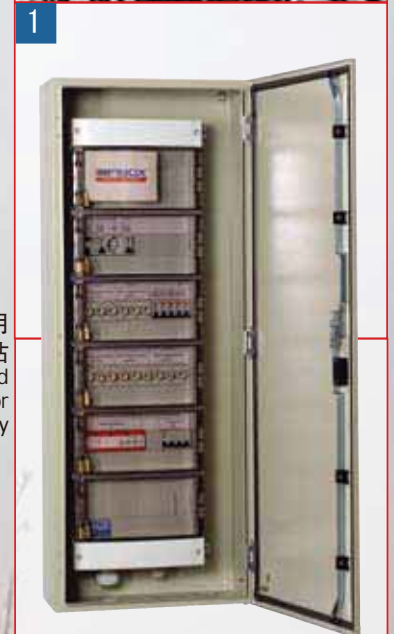
### DEHNgard® modular

- ……根据供电系统的接线方式，选择保护装置极其简单
- ……SPD的监控装置“动态热脱扣”，安全性高
- ……防止电涌的干扰，确保有较长供电线缆的RBS/配电柜的安全

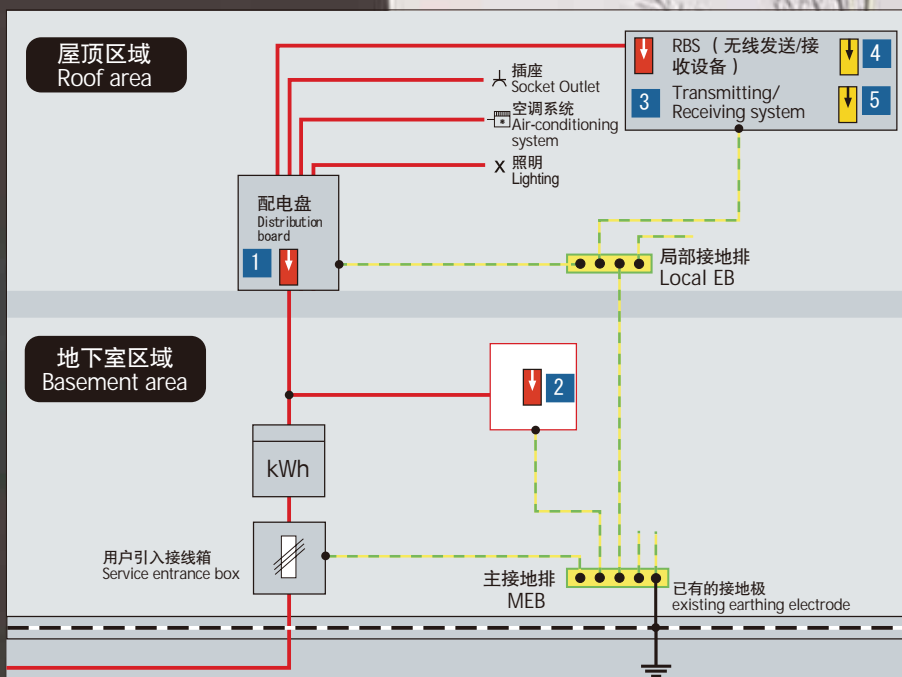
### DEHNgard® modular

- ... convinces with easy choice of SPDs according to system configuration
- ... sets the benchmark in monitoring with Thermo Dynamic Control
- ... Power supply cabinet with integrated lightning current and surge arrester for GSM/3G sites of T-Mobile, Germany

内置雷电流 / 电涌保护器的电源柜，用于德国 T-Mobile 公司 GSM/3G 基站  
Power supply cabinet with integrated lightning current and surge arrester for GSM/3G sites of T-Mobile, Germany



安装在开关柜中的DEHNBloc® Maxi 和 DEHNgap Maxi  
DEHNBloc® Maxi and DEHNgap Maxi in a meter cabinet

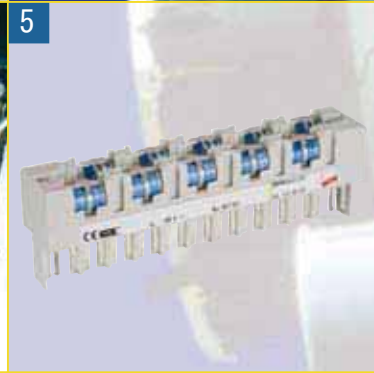
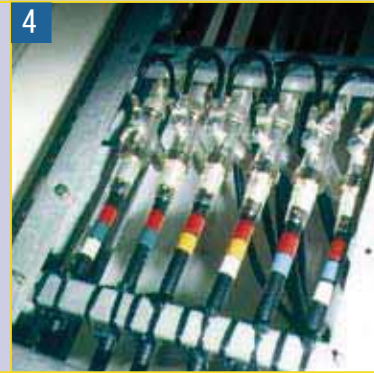


# 风险控制 —— 射频传输设备的电涌保护

## Control the Risk – Surge Protection of your RF- and Transmission Equipment.

DEHNgate AG N  
货号: 929 045  
允许远程供电  
allows for remote power supply

DEHNgate LG 7 16  
货号: 929 046  
最佳互调 (IM/PIM) 性能  
best intermodulation performance (IM/PIM)



DEHNgate L4 7 16 B,  
货号: 929 048  
控制雷电流  
controls lightning currents

DEHNgate L4 7 16 B  
连接射频电缆  
DEHNgate L4 7 16 B  
connected to RF cables

DEHNrapid® LSA  
DRL 10B 180 FSD

### DEHNgate

- ……保护射频设备，即使在遭受直接雷击时亦可保护
- ……提供不同的安装方式
- ……支持多载波系统 (GSM 900, DCS 1800, UMTS/3G)
- ……无须维护，易于服务

### DEHNgate

- ... protects your RF equipment even in case of direct lightning strokes
- ... provides various installation possibilities
- ... supports multicarrier systems (GSM 900, DCS 1800, UMTS/3G)
- ... convinces with no maintenance problems and easy service

### DEHNrapid® LSA

- ……保护网络终端线和室外警报器
- ……最小化空间和重量
- ……易于连接
- ……提供可视化故障信号

### DEHNrapid® LSA

- ... protects your network termination line and external alarm signals
- ... reduces space and weight
- ... allows for trouble-free installation
- ... provides visual fault indication by colour change



# DEHN电涌保护器 保护基站遍及全球



DEHN protects  
Cell Sites worldwide.

德国T-Mobile (D1)	德国
DB AG (GSM-R)	德国
Orange (英国电信公司)	英国
Sonera (索纳诺, 芬兰著名电信公司)	芬兰
Nokia (诺基亚)	芬兰
Sonofon (丹麦第二大电信公司)	丹麦
Orange	荷兰
T-Mobile NL	荷兰
Proximus	比利时
Alcatel	法国
SFR Vodafone	法国
TdF	法国
Sunrise	瑞士
Ericsson	瑞典
Telecom Italia Mobile (TIM)	意大利
Wind	意大利
Telefonica Moviles	西班牙
Airtel	西班牙
Telecel	葡萄牙
ERA-GSM	波兰
Plus-GSM	波兰
Westel	匈牙利
Panon GSM	匈牙利
Mobitel Ljubljana	斯洛文尼亚
MTN	南非
Telstra	澳大利亚
Telesp Cellular	巴西
France Telecom Mobile	
Du Liban (FTML)	黎巴嫩
Spacotel	叙利亚
Spacotel	也门
Orascom Telecom	阿尔及利亚
BSNL	印度
Hutchison	印度
Satelindo	印度尼西亚
China Mobile	中国
China Unicom	中国



如果需要, 我们可以为您提供更详细的应用清单。  
A comprehensive list is available on request.