

case studies

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Integrated data centre solution

WITH HIGH ENERGY EFFICIENCY

Switzerland:

Underground

EDGE DATA CENTRE

Innovation:

DATA CENTRES:

High density cabling solution

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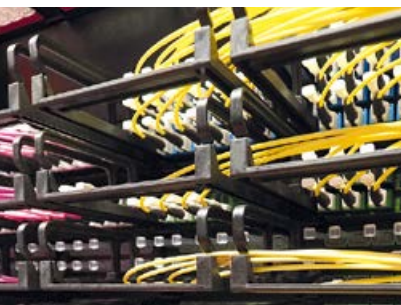
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EDITORIAL

SUCCESS as a Service?

Dear Readers

We are familiar with the model of electricity, water, telephone and Internet: you pay a monthly charge and in return receive the agreed service. There are similar models for new and more complex services.

Of course in future it would also be great to be able to "subscribe to" or "plug into" personal or commercial success. All you would then have to do is decide whether you wanted the "Gold" package or were satisfied with "Economy" success. For sure there never will be such a service. But the trend from CAPEX (capital expenditure) to OPEX (operational expenditure) cannot be ignored.

The amount of data produced worldwide is currently doubling every year or two. Technologies like the Internet of things (IoT), artificial intelligence (AI) and 5G are leading to new, data-intensive applications and are speeding data growth even more. Millions of sensors built into machines, surveillance cameras, lifts, intelligent buildings and lifestyle products allow "things" to communicate directly with other "things" via the Internet. Much of this data is used in real time, so needs to be processed close to its sources and users. Sufficient "in situ" processing power will therefore soon be as important as the electricity, water and data connections mentioned above.

Now imagine, if you will, that your socket acquires another (of course virtual) "hole", from which you can obtain the requisite process-

ing power by subscription, and that you pay suppliers a monthly charge for their IT infrastructure services. Hospitals could care for their patients, bankers look after their customers and automotive manufacturers produce vehicles without having to deal with major capital expenditure for something which is not really part of their key functions or core competencies. In this case the operation and maintenance of the IT infrastructure which provides the processing power would be the responsibility of a specialist partner. Is this concept – "IT infrastructure as a service" – unrealistic? I do not believe so.

Until then, however, solutions for a range of other problems need to be found. For example, the power consumption of data centres keeps increasing, and this despite continually improving energy efficiency. In this sense the growing need for processing power is totally incompatible with the policy of so many governments looking to reduce power consumption.

So if your home should suddenly be plunged into darkness, maybe that is because the data centres are using too much power and the infrastructure is overloaded. Of course it could also be the Tesla at the charging station causing the shutdown. Be that as it may, on the way to the garage don't forget to take a hammer with you. No Internet without electricity. And, unfortunately, without the Internet you won't be able to open your car.



I hope you enjoy reading this issue,

A blue ink handwritten signature, appearing to read 'J. Müller', written in a cursive style.

Johannes Müller
CEO



Jinshang Bank Co. Ltd, Taiyuan:

Integrated data centre solution **WITH HIGH ENERGY EFFICIENCY**

In the Mingli Training Centre in Jincheng Datwyler has implemented a comprehensive data centre solution for the Jinshang Bank.



In order to increase the energy efficiency of their data centre, more and more operators are nowadays placing high demands on server room infrastructure and cooling plant design – in terms of both power supply and heat dissipation. In this context the cold aisle is a design scheme which arrived at just the right time, and has rightly become the preferred option for increasing numbers of data centre operators. Of course a cold aisle is not an air conditioning unit. Yet this optimised design scheme can dramatically increase the efficiency of the cooling plant and cut energy costs if the layout of the server room is sensibly planned, the data centre environment properly sealed, the distribution of cool air flow optimised, and the cooling brought closer to the heat sources.

For the supporting columns Datwyler supplied special “cladding” and specially dimensioned racks.

30 percent energy saving

For the server room of the Disaster Recovery Data Centre Datwyler supplied customised cold aisle racks which are used as server racks, and the complete set of cold aisle components including the doors and skylight components. Together with the floor they form the containment solution. This design separates the cold and hot air and carries the cooling airflow to the parts of the IT equipment which need cooling. This increases cooling efficiency and the bank saves around 30 percent of the energy required to achieve cooling.

During an on-site visit made in an early phase of the project Datwyler's technical team discovered some load-bearing columns which had to be incorporated in the design. Datwyler's Product Division quickly came up with a good solution. This was customised “cladding” designed specifically for the columns, and specially dimensioned racks which helped to solve any problems with the planned layout.

The project was completed at the end of August 2019 and handed over to the customer on time. It comprised 131 racks forming seven cold aisles, 268 PDUs as well as comprehensive cabling solutions, including the complete preassembled OM4 fibre optic cabling system and Cat.6_A copper cabling system.



Even the cold aisle racks, skylight elements and doors come from Datwyler.

Jinshang Bank's Disaster Recovery Data Centre, located in the Mingli Training Centre in Jincheng, in the south of the Chinese province of Shanxi, uses the cold aisle design. The data centre covers 800 square metres – with a room height of over five metres. It comprises the main server room, a room for test runs, one for access to the communication node, and other separate rooms for steel cylinders, ECC control and equipment, and high voltage power.



Neat cable routing from above

Integrated services

In addition to the project-specific solutions, Datwyler provided the bank with all the services it needed from a single source, from the site survey and planning through cold aisle design to documentation, which also includes instructions for connecting the hardware correctly. These services convinced the customer that Datwyler is not only a trustworthy product supplier, but also a reliable provider of integrated services. (erw/kag)



Kuala Lumpur Airport:

In the interests of **FLIGHT SAFETY**

A new foreign object and debris detection system has been installed at Kuala Lumpur Airport. A product solution from Datwyler helps in the rapid evaluation of data.

“**Datwyler is able to offer us a wide range of high-quality Swiss-made products.**

Silvan Subramaniam, Cyberlan Integral Sdn Bhd

Cyberlan Integral Sdn Bhd, headquartered in the Malaysian city of Petaling Jaya, was established in 1996. It provides its customers with comprehensive ICT solutions. For a long time Cyberlan has been using cabling solutions from Datwyler for their physical infrastructures, as these are the best at meeting the company's high standard of quality and performance.

One of Cyberlan's most recent projects is to connect twelve new radar towers and the new Foreign Object and Debris Detection System (FODDS) to the air traffic control servers at Kuala Lumpur International Airport (KLIA). After the prototype at To-



The air traffic control building



*One of the radar towers (top)
with high-resolution camera (bottom)*



*Installing cable in the pipe system using
a pulling rope*



Fibre optic patch panel in the rack

kio-Narita airport, the system installed at KLIA – developed by Hitachi Kokusai Electric, the Technical University of Malaysia and the airport management company MAHB – is the first fully operational FODDS in the world built on Linear Cell Millimetre Wave radar and fibre optic technology.

Fast, precise evaluation

Within a few seconds this system detects foreign objects on runways within a radius of 500 metres. Thanks to high-resolution cameras and real-time data transmission, even button-sized parts and their sources can be identified quickly and precisely, increasing safety and simplifying the cleaning process.

The system also has other advantages such as low operating costs, low radio beam emission and high scalability. The latter is particularly

important at airports with high traffic density. Between January and October 2019 Cyberlan installed around 60 kilometres of Datwyler's waterproof "FO Outdoor" cables with loose tube and central tube design and corrugated steel tape armour for the fibre optic connection of the twelve radar towers. The 12- and 48-fibre single mode cables were selected for their robust design, high tensile strength and high-quality Swiss precision manufacture.

"Datwyler is able to offer us a wide range of high-quality Swiss-made products which satisfies the critical nature of our customers' business," explained Silvan Subramaniam, the proprietor and managing director of Cyberlan Integral Sdn Bhd. (ads) ■

PT. Hutama Karya, Jakarta:

From consulting to **TURNKEY SOLUTION**

Datwyler impressed PT. Hutama Karya with the planning for the data centre design in the construction company's new headquarters. It became something more.

PT. Hutama Karya, founded in 1973, is one of Indonesia's largest state-owned construction companies with over 1000 employees. In 2018 the company began building a new headquarters in Jakarta, the country's capital, situated on the north west coast of the island of Java. Among other things this project involved the construction of a data centre.

PT. Hutama Karya relied on the expertise of a specialist consultant for the planning, construction and installation of the new IT systems and data centre. This was suggested to the company by their long-standing system integration partner.



In the same year Datwyler was given the opportunity of demonstrating to the IT manager in charge and the in-house consultant the company's extensive know-how in planning IT infrastructures and data centres. In close cooperation with PT. Datatel Inter Nusa, its certified partner, the Datwyler team submitted two proposals for the data centre design in a very short time. These not only met all the construction company's requirements, but also offered the potential for cost savings. This created the foundation for a collaboration based on trust, and PT. Hutama Karya awarded the design consultancy to Datwyler.

The contract covered the data centre backbone, the complete interior design, and the selection, erection and equipping of the racks – including the hardware – for the subsidiaries of PT. Hutama Karya in the building. Added to this there was the complete data cabling, the fire detection, protection and extinguishing systems, UPS and emergency power, the precision air-conditioning system, power supply and distribution, environmental and security monitoring as well as other safety systems.

The data centre was built and equipped in accordance with these plans between January and May 2019.

The successful consultancy led to several follow-up orders. Initially Datwyler also supplied the racks as well as the copper and fibre optic systems for the new data centre. In the meantime the construction company, highly impressed by Datwyler's expertise in the area of complete solutions, has requested a quotation for after-sales service. (suc)

Ebttikar's Security Operations Centre
and Network Operations Centre

Ebttikar Technology Co., Riad:

Future-proof MINI DATA CENTRE

Datwyler is equipping Ebttikar's Security Operations Centre and Network Operations Centre with a "Mini Data Centre" tailored to their requirements.

In order to achieve the maximum possible performance and transmission speed, Saudi Ebttikar Technology Co. commissioned Datwyler Middle East to supply a prefabricated "Mini Data Centre" solution for one of their branches. The solution consists of four preassembled IT racks and an in-row cooler. The new data centre is located in Ebttikar's Security Operations Centre (SOC) and Network Operations Centre (NOC).

Ebttikar was established in 1984 and is a subsidiary of the Saudi National Technology Group. Owing to strategic partnerships with leading technology vendors, a solid service infrastructure and its commitment in the region, Ebttikar has developed into one of the Kingdom's leading suppliers of IT infrastructure solutions.

The "Mini Data Centre", which will be delivered shortly, is a prefabricated solution tailored to Ebttikar's requirements and is ready for immediate use. The Datwyler solution includes energy distribution, UPS and emergency power, cooling, fire alarm and fire extinguishing systems, access control, warm and cold aisle containment together with user-friendly software for environmental monitoring and management. Not only is this solution space-saving and cost-effective, but it can easily be expanded as required in future. (soa)



Four IT racks with a side cooler

Sculptures on the Peccioli waste disposal site. The new amphitheatre in the background



Peccioli Municipal Authority:

A town looks **FAR AHEAD**

The municipal authority in Peccioli is pressing ahead with new, innovative and sustainable development projects. Datwyler's future-proof system solutions match their needs.

Peccioli, on a hill overlooking the Valdera in Tuscany, is a small community of five thousand inhabitants. The town has become famous as a venue for national and international

events which draw thousands of visitors all year round. At every turn tourists strolling through the ancient streets come across exhibits and installations by modern artists

which enrich the community's historic and architectural heritage. This overlapping of history and contemporary art is a deliberate promotional strategy on the part of the authority.



Maurizio Fontanelli, iTEK, Renzo Macelloni, Mayor of Peccioli, Luca Dalla Grana, Datwyler, and Yuri Bagnoli, Domus (from left to right)



Data cable "CU 7060 4P"

"Without a long-term vision we risk being left behind," explained Renzo Macelloni, the Mayor of Peccioli. "We want to enable our community to prepare itself as well as possible for the challenges which the future holds for us, and to achieve our social, economic and cultural goals by keeping pace with the rapid evolution of technology."

Peccioli is also famous for another project: the finest (!) and most advanced waste treatment and disposal plant in Italy. Under the leadership of its resourceful mayor the local authority has transformed the area into an attractive destination for first-class cultural events. In addition to which the plant generates a profit of several million euros every year. The bulk of this is invested

in local projects such as museums, educational and multi-purpose facilities, the nursery school, music academy, solar park and cycle tracks.

No resting on their laurels in Peccioli

When Datwyler's Solution Partner iTEK started working with the Peccioli municipal authority in 2018, the system integrator was faced with the task of developing an IT infrastructure which facilitated the erection and dismantling of contemporary sets for international events. "The cabling infrastructure is the physical basis on which the reliable operation of the systems depends," explained Maurizio Fontanelli, the owner of iTEK. "We lend assistance to the local authority in the planning phase and support Domus, the local firm, during installation."

audio and video signal transmission at 10 gigabits per second (Gbit/s) and has plenty of spare capacity.

The system installed turned out to perform so well that the local authority entrusted iTEK with further projects, including the renovation of an old cinema which today is used for conferences and events, and in which iTEK installed the same cabling solution.

The system integrator has also linked key points of the municipality, including the waste disposal site, to a high-speed fibre optic network. "We have replaced the old multimode links with Datwyler's 24-fibre, armoured single-mode cable so that all the offices can exchange their data at a speed of 10 gigabits per second," explained Fonta-



The modern library in a bucolic landscape, with rooms dedicated to adults, students and children



The convention centre in the landfill

"We don't rest on our laurels in Peccioli," says Yuri Bagnoli of Domus, which has been looking after the municipal authority's technical projects for a long time. "The administration puts a great deal of effort into the well-being of the residents and into new technologies which promote it. Almost every day an idea for a new project lands on the desk, or everything has to be set up for a forthcoming event. So a reliable technological infrastructure is vital, and it is also absolutely essential that all the companies involved are extremely flexible and quick to react."

Modern communications infrastructure

The first challenge for iTEK was to plan the physical infrastructure for a multimedia library with a conference room equipped with video projection. iTEK suggested a shielded Category 6_A/Class E_A cabling system from Datwyler, which provides reliable

ness. The cabling systems installed for the authority are covered by Datwyler's 25-year system warranty.

The fibre optic backbone belongs to the municipality. It incorporates all the communication services including telephone traffic. On this basis the municipal authority plans in the coming years to equip all public spaces with the same high-performance copper cabling already installed in the multimedia library and the former cinema.

The value of foresight

"Datwyler is the only supplier we know who is highly focused on the future and the requirements it entails," continued Maurizio Fontanelli. "Unfortunately in Italy solutions are still being implemented which are inadequate for the performance challenges yet to come. At iTEK we design systems which

don't need to be touched again for at least twenty years. Fortunately we did not have to explain this concept to the Peccioli authority, as it has the necessary foresight and always invests for the long term."

"This is an extraordinary story, especially for Italy," commented Luca Dalla Grana, Managing Director of Datwyler Cabling Solutions in Italy. "The projects implemented in Peccioli are based on the collaboration of a group of enlightened stakeholders with a common passion for quality and a farsighted approach with regard to the benefits of a modern cabling infrastructure." (lud)

Egypt:

THE POWER OF "BIG DATA"



*"Innovate Tour" participants
(from left to right): Hamza Soud,
Senior Sales Engineer at Connect,
Amgad Habib, Sales Manager at
Datwyler Middle East,
Ayman Farouk, Business
Development Director at SEE,
Asem Shadid, Managing Director
at Datwyler Middle East, Moham-
med El Sayed, Infrastructure and
Communications Manager at Atti-
jariwafa Bank, Ayman Aboslema,
MEA District Chair at BICSI, and
Ahmed Hamdy, Senior Pre-Sales
Engineer at Crystal Networks*



*Asem Shadid, Managing Director
of Datwyler Middle East,
giving his talk*

In early April 2019, Datwyler Middle East took part in the "Innovate Tour" organised by IT Events in the Hilton Heliopolis in Cairo. The conference, certified by Building Industry Consulting Service International (BICSI), was aimed at senior consultants and they were given BICSI's Continuing Education Credits (CECs) for participating.

The event in Cairo produced a substantial list of keynote speakers and experts. One of them was Asem Shadid, Managing Director of Datwyler Middle East. In view of the fact that the ICT industry is continuing to grow in size and sophistication and is inspiring people all over the globe, he talked to his audience about "The Power of Big Data" and about how the huge complex volumes of data influence both our daily life and the IT technologies – for example data centres and edge computing.

Many of the leading consultancies in Egypt and the region took the opportunity of refreshing their knowledge and making contacts – with Datwyler among others. (amh) ■

Saudi Arabia:

TECH ROADSHOW IN RIYADH

At the end of February the IT services and solutions provider Al-Rajhi Telecom held a Technology Roadshow at the Movenpick Hotel in Riyadh. The event was attended by over 200 representatives from ministries, consultancy firms and companies from various sectors of industry.



Technology Roadshow visitors

Soubhi Al-Aliwi, Datwyler Sales Manager Saudi Arabia, presented the IT solution provider's portfolio to the visitors on behalf of Datwyler Middle East. The presentation, which focused on Datwyler's future-proof data centre and fibre network solutions, elicited a very positive response from those present. Many of them were particularly interested in the value-added services offered by the Datwyler team to its customers in the region. (shs)



Datwyler Sales Manager Soubhi Al-Aliwi talking to a visitor

Oman:

SEMINAR DAYS IN MUSCAT

At the end of April the Datwyler Middle East team organised two seminars at the Grand Millennium Hotel in Muscat, both of which were well attended. The first one was reserved for ministries and leading end customers in Oman, the second one was aimed at Datwyler's certified partners.

At the customer event Shaheer Shaaban, Head of Technical and Project Management, Ihab Gazawi, Head of Datwyler Data Centre Experts, and Sales Manager Suresh Kumar presented the latest updates and innovations in the field of IT infrastructures, including fibre network and data centre solutions. The partner event comprised presentations and discussions on topics such as structured cabling solutions, design, installation, termination of copper and fibre optic cables, acceptance tests, and the Datwyler System Warranty.

Participants at both seminars also used the event for discussion and information exchange. This enabled the Datwyler team to gain a better understanding of current market conditions, customer requirements and the views of its partners. (suk)



Sales Manager Suresh Kumar presents Datwyler's current portfolio to end customers.



Shaheer Shaaban and Suresh Kumar with those attending the partner event in Muscat.

United Arab Emirates:

NEW DISTRIBUTOR



Sherif A. Ibrahim, Divisional Manager ELV Systems at Senter Electrical (left), and Asem Shadid, Managing Director of Datwyler Middle East

In Senter Electrical Datwyler Middle East has gained another distributor for the company's structured cabling solutions in the United Arab Emirates.

Senter Electrical was founded in 2000 and is one of the leading electrical wholesalers in the country. Since 2008, as an associate company of Edmundson Electrical UK, Senter Electrical has expanded its business activities in the region and today has branches in the United Arab Emirates, Oman and Qatar.

The skilled technical marketing team at Senter Electrical is very familiar with Datwyler's cabling solutions, as the companies have collaborated on individual projects for some years. In April 2019 the wholesaler's tireless commitment and support resulted in the distribution agreement with Datwyler.

Senter Electrical promises great things as a partner for Datwyler Middle East. The company has excellent contacts with MEP planners and constructors, facility management companies and local contractors. (ahk) ■

Italy:

Full speed INTO THE FUTURE

Datwyler has been operating in Italy for 15 years. In June the anniversary was celebrated in style.



The anniversary celebration took place in the Ferrari Museum in Maranello



Future outlook

In his presentation Ralf Klotzbücher, Datwyler's Vice President Sales & Marketing Europe, provided the guests with an insight into future technological developments.

The anniversary celebration took place on 13th June 2019 in the Ferrari Museum in Maranello – together with 60 clients including distributors, installation partners, planners and end customers. In addition to fun activities the event provided a good opportunity to talk about current market developments and the many future business opportunities arising in Italy.

Owing to various structural, cultural and economic factors the cabling market in Italy is technologically underdeveloped by comparison with some other European countries. Moreover the local market experienced a continued decline in volume between 2002 and 2015, which fortunately

ended in 2016, and a distinctly price-based orientation.

Clear strategy

Despite this, over the years Datwyler has managed to secure a significant slice of the cake – thanks to committed staff and a clear strategy: reliable and future-orientated solutions, multi-channel sales, “real time” customer support, knowledge exchange and inimitable communication. As a contender – and Datwyler has always been one in Italy – all sales activities have succeeded in building up a good reputation which has served and continues to serve as a long-term basis for business.

The party in the Ferrari Museum was an opportunity for Datwyler to affirm company values and demonstrate to its partners ways in which the company can continue to grow together in a fiercely competitive environment. Loyal end customers like the European Space Agency (ESA) and installation partners such as GTI were actively involved in the event, sharing their experiences and opinions with the guests. Riccardo Montanari, a respected coach for executives, also talked about strategic thinking.



*Luca Dalla Grana,
Managing Director of Datwyler in Italy*

Luca Dalla Grana, Managing Director of Datwyler in Italy, summarised the history of the Italian cabling market and highlighted the “gap” which still exists between Italy and many other European countries. He recommended a joint strategic approach to help the entire market take the necessary step forwards and close the technological gap.

You will find a video of the party and interviews with guests in the News section of our website. (lud) ■



China:

PARTNER CONFERENCE

in Hangzhou

In mid April this year's Chinese Partner Conference was held at the West Lake in Hangzhou, capital of the province of Zhejiang.

Since last year Datwyler has increasingly been concentrating on expanding its business activity in data centres and IT infrastructure solutions for IoT, 5G and Industry 4.0 in China as well. The conference, held on 11th and 12th April in Hangzhou, was used by Datwyler as an occasion not only to introduce new hardware and software solutions to business partners throughout the country, but also to discuss new business opportunities and improved collaboration.

Transformation and innovation

48 representatives of 33 partners attended the conference. Xubing Xia, Managing Director of Datwyler in China, welcomed the

participants, both new and long-standing, and thanked them for their support over the past year. He then highlighted Datwyler's vision of becoming one of the leading suppliers of end-to-end IT infrastructure solutions. He encouraged the partners to open up new sectors in addition to the traditional cabling business. As an example he mentioned software solutions for network visualisation as well as micro data centres and associated service platforms, in which long-term recurring revenue can be generated by suitable projects. Xia explained that the market has changed, and the traditional cable business is highly competitive. The important thing is to seize this change as an

opportunity for further development and mutual advancement.

During the conference Channel Manager Arjun Zhu presented Datwyler's most recent micro data centre, which in China is called "Smart Rack". This is equipped with touchscreen, PDU, cooling, video monitoring, UPS, modular battery pack, monitoring server, acoustic and visual alarm as well as with temperature, humidity, smoke and leakage sensors. A project engineer demonstrated how to monitor and control this solution remotely using an app – after which there was a lively exchange of views on possible market applications.



Mutual benefit

Three additional workshops were held. These dealt with the development of new and traditional spheres of activity, the expansion of the data centre business and improved partner support from Datwyler's internal sales team.

On the evening of the first day those attending received their certificates for 2019. Four of the partners were presented with special awards to mark their long collaboration with Datwyler and their outstanding performance last year.

The great majority of partners took part in an outdoor team-building event held on 12th April to boost solidarity and team spirit. The group competitions – both games and sports – were greatly enjoyed by all. (kag)



Shaheer Shaaban presents Datwyler's products, solutions and services to the Egyptian partners.

Egypt: EIGHT NEW PARTNERS CERTIFIED

In mid July Datwyler Middle East held a seminar for its Egyptian partners in the Hotel Hilton Cairo Heliopolis. Shaheer Shaaban, Head of Technical and Project Management, gave the participants an insight into the company's most recent new developments and a detailed overview of Datwyler's products, solutions and services for future-proof IT infrastructures. Eight qualified system integrators established in Egypt were then awarded their certificates as Datwyler Partners. These companies are Touch Smart, Cereen Misr, Light Design, DBS, Ary Telecom, Data Holic, eCompounds and iLead.

The seminar not only enabled the Datwyler team to build up a good relationship with partners and develop mutual trust. The exchange of information on new market developments and assessments of current market trends and prospects in Egypt was also particularly productive. This information is helpful in reaching decisions on the segments which Datwyler and its partners should focus on in future. (amh)

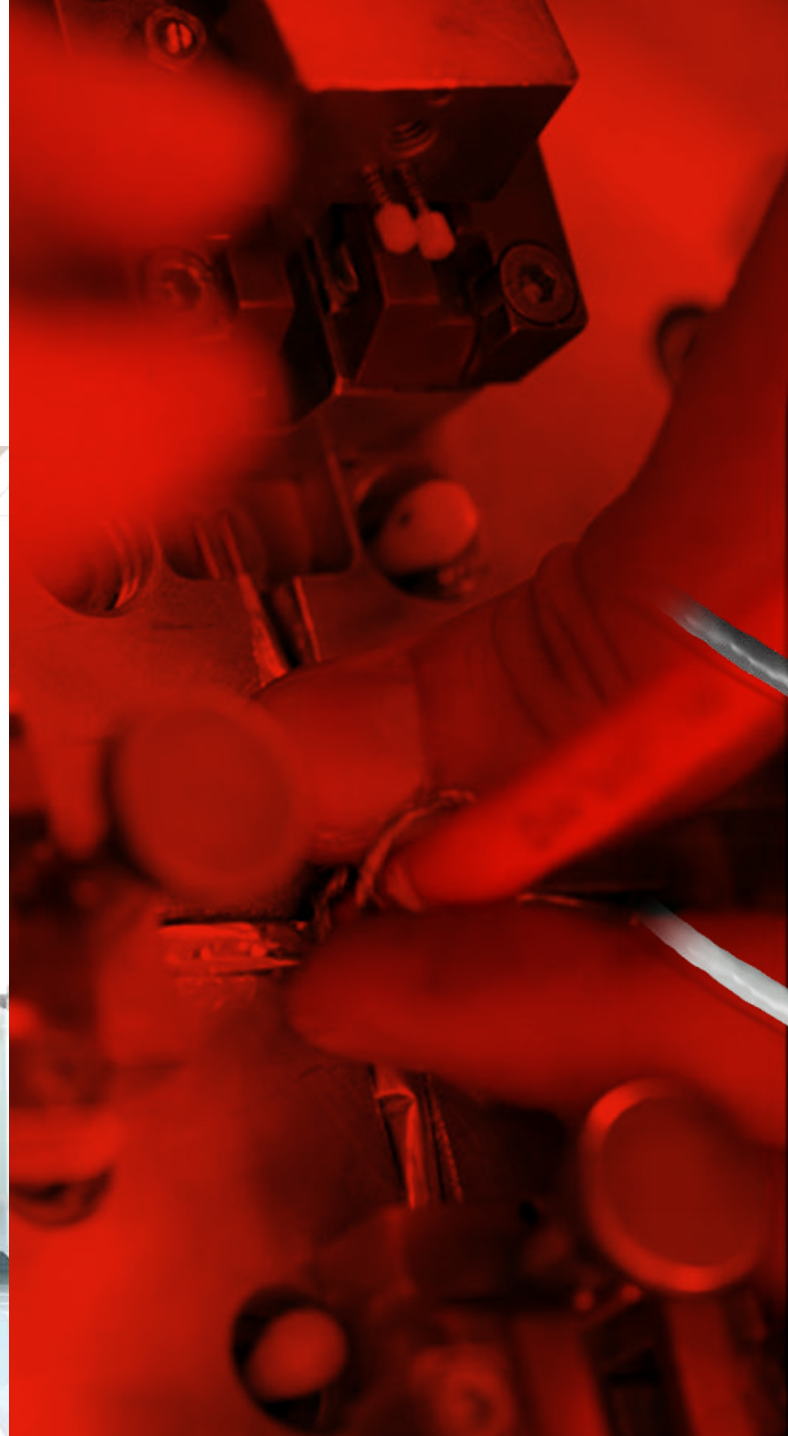


Sami Said, Managing Director of Datwyler distributor Connect Information Technology (centre), together with Sales Manager Amgad Habib and Shaheer Shaaban, both Datwyler, with representatives of the new partners in Egypt

United Arab Emirates: **A MAN** for challenging tasks

The United Arab Emirates are one of the core countries in the Middle Eastern region and a market with great potential for growth. In order to comply with high customer requirements as well as the marketing strategy in the UAE, in August 2019 the Datwyler Middle East team brought in reinforcement in the shape of Mohideen Mohamed.

Mohideen Mohamed is a professional with over 19 years of sales experience in the Gulf Region and excellent know-how in the segments relevant to Datwyler. He combines his proven proficiency in the sale, design and planning of IT infrastructures and data centre solutions with great knowledge, practical experience and modern methods of business development. This will help Datwyler to speed up market development. The focus of Mohamed's activity is on developing and supporting prominent key customers. (kaa) ■



In August Mohideen Mohamed reinforced the Datwyler sales team in the UAE.



The "HD-DC Solution" panel

Czech Republic:

CUSTOMER-SPECIFIC SOLUTIONS



Unshielded Cat.6 patch cable

The Datwyler site in Děčín is expanding its harnessing portfolio.

Datwyler Cabling Solutions s.r.o. is currently working closely with the Datwyler teams in Germany and Switzerland on an investment plan for expanding the harnessing portfolio at the production site in Děčín.

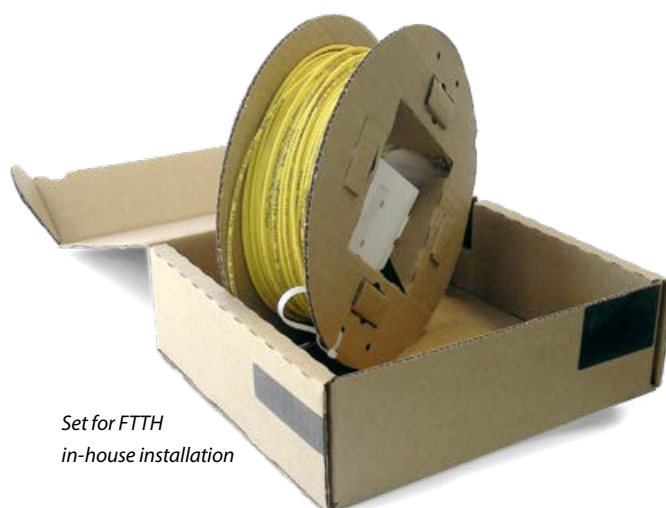
Platform cables and data cables in particular were traditionally preassembled on the Czech site, including products for the world's major elevator suppliers. Last year the harnessing of fibre optic products was added. This includes not only project-specific trunk cables, but also preassembled fibre optic patch panels.

One example is the harnessing of sample panels for Datwyler's new "HD-DC Solution" data centre cabling system (see page 27), which is expected to become part of the standard Děčín portfolio in the near future. Since 2019 the new "OV-CH" panels have also been preassembled at the Czech production site for customers in Switzerland.

In the third quarter sample production for other new products is on the agenda, including connector harnessing for unshielded Category 6 patch ca-

bles. Once testing has been successfully completed these will quickly go into mass production.

The Czech Datwyler site also plans to look beyond the traditional harnessing horizon in future. One possible way of expanding the Datwyler portfolio of IT infrastructure solutions by customised products is definitely the Fibre Network (FTTx) segment. Other options are currently being examined. (jas) ■



Set for FTTH in-house installation

Around 50 guests came to the presentation of the edge computing prototype.



Switzerland:

UNDERGROUND EDGE DATA CENTRE

Prototype for urban spaces of the future

On 18th September the prototype of a modularly designed underground data centre was showcased in the Hagerbach Test Gallery.

Automation, 5G, robotics, the Internet of Things and artificial intelligence are facilitating many new applications and business models, but are already producing a massive volume of data. Mini and micro data centres, so-called edge data centres, are increasingly being used to process this data efficiently and rapidly in situ.

But cities and the urban spaces of the future only have a limited amount of surface space available. To surmount this problem the Swiss Center of Applied Underground Technologies (SCAUT) has developed the concept of "Edge Computing – Underground!" in collaboration with Datwyler and Amberg Engineering. This concept provides

a cost-efficient, space-saving and secure solution to the challenges of tomorrow's "smart cities".

The invisible dimension

The concept of "Edge Computing – Underground!" envisages siting numerous data centres in underground locations. This environment provides protection against the forces of nature and, thanks to the stable climate, high energy efficiency.

Crucial to future town planning is the fact that in this way no demands are made on above-ground space in urban areas, which is scarce and expensive as a rule.



Saudi Arabia:

PARTNERSHIP FOR DC SOLUTIONS

Since August Blinks International Trading Co. has been marketing Datwyler's Micro and Mini Data Centres in the Kingdom of Saudi Arabia. Blinks, previously part of NOMD Technologies, has been an independent company under the umbrella of NOMD Holding since 2016. Blinks specialises in end-to-end supply chains for the trade in network and electrical products as well as data centres (DCs). The company has a great deal of experience in turnkey implementation and is also able to support its customers in Saudi Arabia from five locations in the major cities as well as from another eleven support centres.

As a result of its partnership with Datwyler, Blinks is expanding its range with new DC solutions for applications like edge computing, 5G and artificial intelligence. Blinks' strong customer base and presence in the Kingdom is perfectly complemented by Datwyler's skills and experience in the development of innovative micro and mini data centre solutions which meet every customer requirement. (soa)



Opening ceremony with 50 guests

For the opening and presentation of the prototype on 18th September nearly 50 visitors came to the Test Gallery, situated at the foot of the Eichbuel near Flums. The guests were then able to tour the facility and put their questions to the experts present.

Amberg Engineering, an underground engineering specialist, and Datwyler, specialising in both data centres and edge computing, are SCAUT's industry partners for this pilot project. The test results of the prototype will continually be evaluated and optimised by the project team during the pilot phase period. (dir)



Further information at
www.edge-computing-underground.com



Asem Shadid, Managing Director of Datwyler Middle East (3rd from left), Johannes Müller, CEO of Datwyler Cabling Solutions AG (4th from left), Nawaf Alshalani, the Blinks Group CEO (5th from left) and Mohammed Sayaf, Chairman of Blinks International Trading Co.



United Arab Emirates:

GITEX Technology Week 2019

Datwyler used the biggest trade fair in the region to showcase its innovations and services.



Chairman of the Board Dr. Hanspeter Faessler and CEO Johannes Müller, Dätwyler Cabling Solutions AG, with Mohammed Sayaf, Chairman of Blinks International Trading Co., and Nawaf Alshalani, the Blinks Group CEO

GITEX Technology Week, the biggest technology trade fair in the Middle Eastern, North African and South Asian region, was held in the Dubai World Trade Center in October. The exhibition yielded impressive results: 4500 exhibitors and over 100,000 visitors from more than 140 countries meant that it was once again a resounding success.

For Datwyler as well. On its stand, the Datwyler Middle East team presented the company's most recent innovations in the field of IT infrastructure solutions to a wide audience from the most diverse sectors of industry.

Micro and mini data centres

The main interest of many visitors was in Datwyler's micro and mini data centres – as well as conventional data centre solutions. The "Datwyler Micro Data Centre" is a fully preassembled IT infrastructure solution providing users with a plug-and-play data centre in a self-contained unit. By contrast, the modular "Mini Data Centre" – also an ultra-modern, preassembled and ready-to-use solution – comprises a 42U



Asem Shadid (2nd from right) and Mamoon Dawood, General Manager of the Jordanian distributor Advanced Technologies (right) with his team



Interested visitors on the Datwyler stand



*Asem Shadid,
Managing Director of
Datwyler Middle East,
with his team*



*Ihab Gazawi's
data centre session*

rack with power distribution, UPS and emergency power, fire extinguishing system, blanking plates, brush strips and environment monitoring system, as well as up to eight further racks for the IT equipment and in-row coolers.

Both solutions are suitable for use at the margins of decentralised data centre architectures, for instance for edge computing applications, as decentralised computing nodes in branch offices and subsidiaries, as floor distributors or building distributors, as well as in intelligent factories and buildings using IoT devices, and employing artificial intelligence, virtual reality or automation. Both can also be customised by Datwyler to meet the specific requirements of customers in the best possible way.

The expanded product range met with the unqualified approval of suppliers and end customers. Datwyler's presence at the trade fair clearly showed that it has taken a major step forward in both future-proof IT infrastructure solutions and value added services.

Many interested visitors

The Datwyler experts on site provided short learning sessions throughout. Shaheer Shaaban, Head of Technical and Project Management gave a talk on fibre optic networks. Ihab Gazawi, Head of Data Centre Experts, spoke about current data centre standards. The sessions were well attended.

The success of the exhibition was last but not least due to the guests. Dr. Hanspeter Faessler, Chairman of the Board of Directors of Dätwyler Cabling Solutions AG, and CEO Johannes Müller came to the stand as well as some partners. Other visitors were Massimo Baggi, the Swiss ambassador to the United Arab Emirates, and Frank Eggmann, Consul General and Head of the Swiss Business Hub Middle East. (ass)

Mexico:

SUCCESSFUL TRAINING COURSES

Between May and October this year Datwyler conducted four certification seminars for system integrators in Mexico: in Querétaro, Mexico City, San Luis Potosí and Puebla. All four were organised by distributor Marathon Eléctrica de Puebla and conducted by Datwyler's agent Manuel Pujol and Business Development Manager Enrique Lampatzer, both of whom have decades of experience in the field of structured cabling. Altogether around 80 technicians attended the two-day training courses.

For many system integrators Datwyler's 25-Year System Warranty is an important reason for attending – as well as being a factor which differentiates them from their competitors. As always, the seminars focused on current market trends as well as new products, technologies and standards. It is very important that those responsible for their company IT infrastructures and the engineers carrying out the work are familiar with and able to apply the standards, so that Datwyler's products and system solutions can be implemented correctly in the various applications.

One very popular item was the new "KS-TC Plus Cat.6_A" RJ45 module because of its ease of handling and assembly. In general terms the local partners also praised the quality, reliability and speed with which they were able to complete Datwyler's IT network solutions.

In Mexico Datwyler currently has a large number of system integrators working on various projects in the automotive industry and hospitality sector (hotels) in the south of the country. Both Datwyler's high-performance copper and fibre optic solutions are being used in these projects. (toh)



The certification seminars combine theory with practical exercises.



The flexible test set-up having fibre optic trunks and two sensors which simulated 10 Gbit/s data transmission with no signal loss opened the door to qualitative discussion.

Germany:

ELEVATOR 4.0

interlift 2019

This year “interlift”, the international lift trade fair, was dominated by digitisation.



The Datwyler team in Augsburg

The world's leading lift trade fair, held in Augsburg in mid October, set new records with 577 exhibitors from 44 countries, 21,200 visitors from 108 nations and an exhibition area of 46,500 square metres.

The trend towards digitisation and “Elevator 4.0” was apparent with many of the exhibitors. It was also the main topic on the Datwyler stand. The lift team gleaned a lot of positive feedback on the stand, in meetings and

discussions with service providers, consultants, suppliers and the manufacturers of components, controllers and complete lifts.

The Datwyler stand showcased a flexible test set-up having fibre optic trunks and two sensors which simulated 10 Gbit/s data transmission with no signal loss. This impressed a lot of visitors. The set-up was an “eye-catcher” and opened the door to qualitative discussion. The stand also featured smaller components and two types of travelling cable in different designs.

The Datwyler team welcomed visitors from Europe, the Middle East, China and the Asia-Pacific region. In this respect as well “interlift” was a complete success. (erö) ■



Stand visitors at
"Tech Forum" in Berlin

Germany, Austria, Switzerland:

INDUSTRY MEETINGS

in focus

In 2019 the European Datwyler team concentrated on specialist industry events rather than on major trade fairs.

The events go under the name of "Tech Forum", "Data Centre Symposium" or "Data Centre Brunch". They are relatively small, but with their high-quality specialist presentations and workshops bring together experts, industry insiders and end customers and create space to exchange experiences and hold intensive in-depth technical discussions.

Datwyler's European organisation participated in many of these specialist events in 2019, the German language venues including Hanau, Innsbruck, Berlin, Zürich, Stuttgart and Cologne – always with an own stand, generally also with exciting presentations on current trends in the field of data centre infrastructure.

The "Datwyler Micro Data Centre" was one of the chief attractions on the stand. Spurred on by the emergence of new technologies like IoT devices, autonomous vehicles and the new 5G mobile telecommunications standard, micro data centres are a good solution for dealing with the increasing demand for decentralised data processing at the "edge". Although everyone is talking about the "cloud", edge computing is indispensable for reducing latency times and transmission costs, and for improving service quality as a whole.

Current developments call for the monitoring of scalability, security and energy consumption in central data centres. Specialist planners find that Datwyler has the problem-solving expertise to design these data centres for maximum performance and meet the rising demand for energy efficiency and cost effectiveness. (chj) ■



At the
"Data Centre
Symposium"
in Hanau



Pius Albisser, Senior Engineer Data Centre Solutions at Datwyler, gave a talk in Berlin on sustainable high-speed networks in data centres.

Preventative fire protection:

New

VAD 3 OUTLET

Is it simply an outlet?
Yes indeed. But even
standard products can
still be improved.



KR6 terminal (left) and
KR6.4 double terminal.

The new model of Datwyler's tried and tested "VAD 3" connection / terminal box gives users a halogen-free, impact-resistant plastic box with pre-stamped cable glands and a preassembled rail with ceramic feed-through terminals. Thanks to the new clamp design each of up to four 2.5 mm² conductors can be double-clamped to a KR6 terminal. In the KR6.4 double terminal design four conductors of up to 6 mm² can be clamped together. The external fixing brackets for direct mounting halve the installation time.

The box has IP54 entry glands and is supplied with fire safety plugs. These are suitable for fixing to concrete, lime-sand brick and solid clay brick.

"VAD 3" conforms to enhanced functional integrity in accordance with DIN 4102-12 with various types of Datwyler ceramic safety cable.

It is available in two sizes and in versions for various applications, for example for safety lighting, as a connection box for smoke extraction drives and smoke extractor fans, or for fire alarm systems. Special solutions and different terminal mountings can also be supplied by Datwyler on request. (pep)

You will find more
information on
our website.



Data centres:

HIGH DENSITY CABLING SOLUTION

Datwyler's "HD-DCS" is a plug-and-play cabling solution for future-proof data centres, which provides up to 96 LCD or MTP ports on one rack unit.



Higher port densities and maximum flexibility. Integrated cable management. Secure, easy-peasy cable handling at front and rear. Generous labelling fields and optimum clarity. These are only some of the highlights which the newly developed "HD-DC Solution" can offer users.

The "HD-DC Solution" is a compact, modular and efficient-to-use platform, which was designed as a flexible modular system. With this system solution even handling the high port densities associated with large switches and SAN directors is child's play.

On only one rack unit the 19-inch platform provides up to 96 LCD or MTP ports, i.e. up to 1152 fibres with MTP12. At the same time LCD and MTP ports can be combined as re-

quired. The port density of each plug-in module can also be individually selected. For this reason the modular system comes in three versions with 6, 12 and 24 ports. Last but not least, in the event of subsequent expansion the port density can easily be increased on partially extended panels – even during routine operation. This makes optimum use of the valuable space in hyperscale and cloud data centres while giving maximum clarity. *(phb/pia)*

You will find more information in the data sheets on our website.



Broadband connection:

UNDER THE COVER

“OTO Cover-AP” is a practical FTTH connection box, also designed for retrofitting and as a preassembled in-house cabling solution.



splice protection holder for ANT and shrink splicing, and laser protection and dust covers for the couplers.

on the cable. This solution, which Datwyler offers in various preassembly options, is suitable for connecting a building entry point (BEP) to the optical communication outlet (OTO).

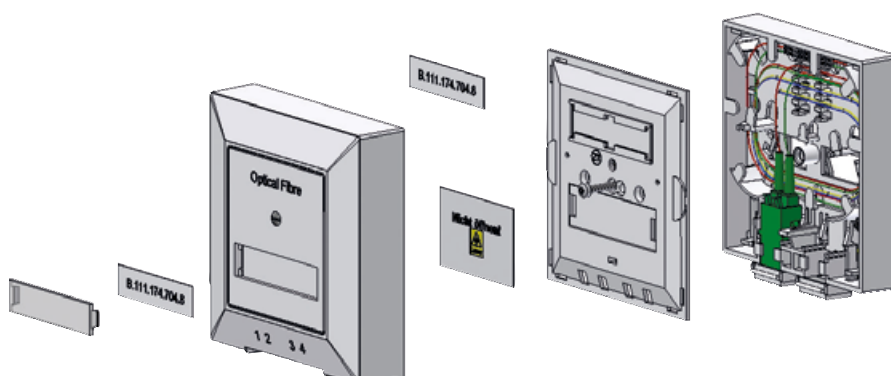
In Switzerland Datwyler has recently started offering its customers a new FTTH connection box with an inner lid and a cover. The patented “OTO Cover-AP” surface-mounted box can quickly be found during servicing by the inscription. Only the cover is removed for renovation work. The OTO box with cover and labelling stays mounted on the wall. This keeps the fibre optic connection protected.

FTTH cable included

The new box can also be supplied as an FTTH in-house solution, i.e. with a thin preassembled FTTH cable, wound on a recyclable blister reel and with a feed hook

In many other countries, for example Germany and Austria, Datwyler also supplies similar preassembled FTTH in-house installation kits on a cardboard drum in a cardboard box. (daj) ■

The “OTO Cover-AP” is available from Datwyler as a complete connection box with one or two couplers, and as a cover kit for retrofitting existing boxes. In addition to the labelling windows and the printing on the cover, it provides integrated fibre storage for connecting cables and pigtails, a





Fibre optic technology:

Universal cables with **IMPROVED FIRE CHARACTERISTICS**

In October Datwyler introduced a new family of cables: "FO Universal DLTs".

Datwyler's "FO Universal DLTs" are tough indoor and outdoor cables with non-metallic rodent protection, a flame-retardant, halogen-free design with an FR/LSZH sheath and high lateral pressure resistance, which plays an important part in transmission security. Swellable yarns ensure that they are longitudinally watertight.

The new fibre optic cables are available in versions with gel-free stranded loose tubes (wbGGFR) and gel-free central loose tube (ZGGFR). Hence the suffix "DLTs", which stands for "Dry Loose Tube Swelling". Because these dry cables do not "drip" and also the fibres do not have to be cleaned during splicing or connector assembly, they are easy, quick and clean to handle.

The whole family of cables meets the requirements of the European Construction Products Regulation (CPR). Versions of Fire Class D_{ca}, C_{ca} and even "top cable fire performance class" B_{2ca} are obtainable from Datwyler. (phb)

Copper technology:

CAT.7_A CABLE FOR THE MOST EXACTING REQUIREMENTS

The "CU 7702 4P FRNC/GG/FRNC" is setting new standards in terms of stability and security.

Copper data cables installed outdoors need to meet different, more stringent requirements than those demanded of their relatives in structured building cabling. The "CU 7702 4P FRNC/GG/FRNC" recently developed by Datwyler is the best example of this. The hallmarks of this S/FTP cable are high mechanical stability, additional glass roving for rodent protection, and excellent fire properties.

The cable can be supplied in two versions with Fire Class C_{ca} and B_{2ca} in accordance with the European Construction Products Regulation (CPR). This means that it meets the most

stringent requirements of the new European standards for use in tunnels.

The "CU 7702 4P FRNC/GG/FRNC" is an S/FTP Category 7_A cable with a core diameter of 1.4 millimetres (AWG22). It is therefore suitable for the transmission of Power over Ethernet up to 4PPoE (~100 watts). As well as this it has rodent protection by way of a black UV-resistant outer sheath. The cable can be installed in cable ducts, pipes and mesh cable trays. (wea)





Future-proof data centre cabling

A COMPARISON OF DATWYLER'S SYSTEM SOLUTIONS

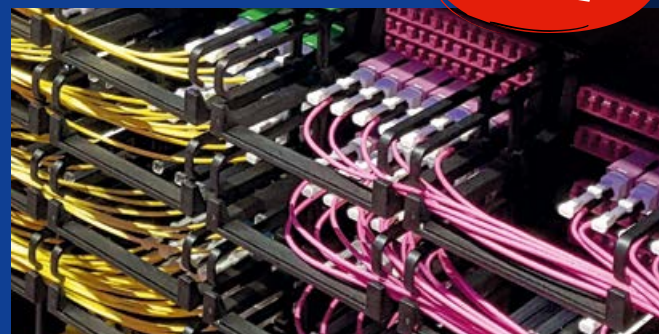


Datwyler Data Centre Solution (FO-DCS)

FO-DCS is a future-proof, preassembled plug-and-go fibre optic solution characterised by high-quality cables and components and a high-precision connector assembly. Its outstanding optical and geometric values make it suitable for all current and future high-speed applications in data centres. Modular components can be combined as required, thus providing users with the ultimate in design flexibility.

Performance features:

- Simple installation with intuitive access from the front
- High quality 3U/7HP plug-in modules
- Connectivity solutions with MTP, LDC and LCQ
- Breakout and splice solutions available
- Simple integration of copper connections



High-Density Data Centre Solution (HD-DCS)

The HD-DCS offers users the same quality features as the FO-DCS with, in addition, more than twice the port density and even greater flexibility. The housings have integrated cable management, which makes installation and maintenance easier. Port labelling is also simpler and more flexible.

Performance features:

- Extremely compact solution with maximum port density (MTP and LCD)
- Flexible assembly with plug-in modules of different size/port density (6, 12, 24)
- Integrated cable management and labelling system
- Compact patch cables (2 mm) with push-pull tabs
- Patch and breakout cables with CPR classification



FO-DCS vs. HD-DCS

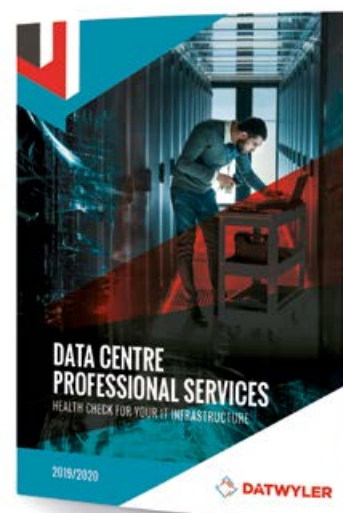
KRITERIUM	FO-DC Solution	HD-DC Solution
Market position	Standard	Premium
Max. number of ports on 1U	36	96
Max. number of ports on 4U	144	384
Connection types	LCD, LSH-C, (SCD), MTP	LCD, MTP
Fibre types	OM3, OM4, G.652.D (BLO)	OM4, G.652.D (BLO)
Max. number of fibres / 1U - LCD	72	192
Max. number of fibres / 1U - MTP ₁₂	432	1152
Max. Number of fibres / 4U - LCD	288	768
Max. number of fibres / 4U - MTP ₁₂	1728	4608
LCD adapter with internal closure	–	●
Splice module	●	–
Breakout module	●	●
Copper module with 6x RJ45	●	–
FO module with 6 ports	●	●
FO module with 12 ports	●	●
FO module with 24 ports	–	●
Patch cable, round, 2 mm	●	●
Patch cable, round, 3 mm	●	–
Patch cable management 0U	● (only with 4U subrack)	●

(fab/phb/dir) ■

Datwyler services: “HEALTH CHECK”

The Health Check is a Datwyler service which provides data centre operators with an initial basic inventory and assessment of the IT infrastructure and associated components in their data centre. While doing this, Datwyler's certified specialists compare the existing environment with current industry standards and proven methods and processes (best practices).

You can find out more in this new flyer on our website. (dir) ■





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