

High density and advanced design on *FTTx*

Premises wiring installations, based on fiber optic cabling, provide a future proof network infrastructure. First and foremost, fiber optic networks provide significant bandwidth capabilities, including future upgrades. With the rapid increase in users, activity and applications, new compact solutions must be sought, economically favorable and to the forefront. High density has become the magical word in these surroundings.



DIAMOND 19" 1U *flexPatch* for 48 fibers

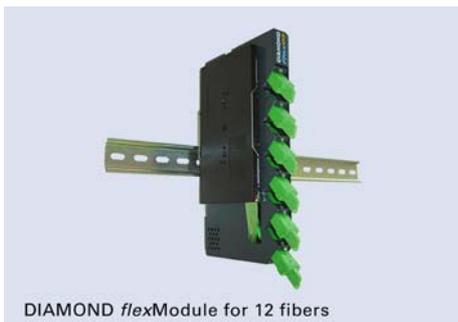
Diamond's 24 E-2000 Compact mating adapters drastically reduce the height of the 19" patch panel enabling the installation of 48 optical connectors in a One Rack Unit (1U) panel. These mating adapters guarantee comfortable and safe access to all involved elements on the front panel as well as stable mechanics and an easily visible organized layout of the splicing applications. This offers sensitive security during manipulation of the outer interfaces. If access to the single connectors on the other side is required, the connection inside the panel can be lifted up with one simple movement,

without interrupting the connection of the outside connectors. Each panel is fixed onto an extractable and tiltable drawer, which contains up to 4 splice trays. Thanks to a vast range of accessories available for cable management, the organization panel remains stable for the entering cables including all associated patch cables.

The compact issue, easy access and clear layout of the fiber optic cable are all the more important when examining the installations of private or commercial users (FTTx). Distribution Panels mounted to the wall are usually preferred in these cases. These considerations were the driving force when developing the 12-channel modular systems mounted onto DIN-Rails. Fastened onto DIN-Rails, 12-channel modules for optical interconnections can be mounted inside



DIAMOND E-2000™ Compact Mating Adapter



DIAMOND *flexModule* for 12 fibers

various infrastructures such as the boxes with different environmental protections (IP), electrical panels and similar distribution systems. The modules allow connection of pre-terminated cables/fibers as well as to fusion splice pigtails as a splicing technique. In this case, the fibers are located inside a protective drawer, fixed on top of the modules. The route of the fibers between the modules and the drawer has been defined in order to guarantee the integrity of the fibers in any situation and allows fusion splicing of the pigtails to pre-assembled modules. The time spent working in the field is drastically reduced. The use of the DIN-Rails enables rapid

and simple extraction of the modules and also to add more at any time. The advantages have been proven in either case, but it has become especially obvious how the introduction of these new high density products have been directly proportionate to a reduction in cost.

Moreover it allows the service provider to offer services on bandwidth through advanced design components dedicated to satisfy the highest requirements of the market.