REMOTE POWER FEEDING PLATFORM

In response to the increasing demand for remotely installed active equipment, Kenton are pleased to announce the launch of its Remote Power Product, which is designed to deliver power to remote locations where local power is not available. Nowadays more and more operators are moving their access points closer to the customer in order to provide higher level services. The power demands vary from small medium-sized devices up to large capacity remote DSLAMs. The Remote Power Feeding system is scalable with up to 12 pairs and can meet either small or medium sized power requirements.

KEY FEATURES...

- Scalable power transmission by selecting up to 12 pairs
- High efficiency at both ends ( > 90%)
- Compliance to safety standards
- EN 60950-1, EN 60950-21
- 48 Vdc output at remote end
- Small RT size
- Overall network management

Targeted applications

Using the maximum capacity of pairs the system is suitable to power remotely installed units in the cabinet. Depending on the power requirement it can power one or more third party devices.

Using just one or two pairs per site the 12-port RPF COT can provide the remote power for different small capacity remote equipment like Wi-fi AP, surveillance cameras, telemetric units.
Description of the system

- There are 12 possible line connections between COT and RT to provide power.
- Independent line handling in terms of power and monitoring.
- High flexibility of installing RT due to its small size.
- EOC channels on both power pairs.
- Scalable power levels per channel.
- Monitored output power with built-in current limiter.

Operating Distance

The system is able to operate on maximum 12 pairs and the usage of the number of pairs is easily scalable. The following table shows some example on different loops.

The considered parameters:

- RPF-COT output voltage level: 350 Vdc per line
- Max operating line current 59 mA (RFT-C)
- Line impedance : 280 Ω per km on PE0.4 cable
- Considering the voltage drops on loops

<table>
<thead>
<tr>
<th>distance (km)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>available power at RT 4 pairs (W)</td>
<td>61.1</td>
<td>57.8</td>
<td>54.5</td>
<td>51.3</td>
<td>48.0</td>
<td>44.7</td>
</tr>
<tr>
<td>available power at RT 8 pairs (W)</td>
<td>122.2</td>
<td>115.6</td>
<td>109.1</td>
<td>102.5</td>
<td>96.0</td>
<td>89.4</td>
</tr>
<tr>
<td>available power at RT 8 pairs (W)</td>
<td>183.3</td>
<td>173.5</td>
<td>163.6</td>
<td>153.8</td>
<td>144.0</td>
<td>134.2</td>
</tr>
</tbody>
</table>

Network Management System (NMS)

The comprehensive Network Management System offers IP-based, centralised, remote and local management capabilities; a full range of operations for the extended telecommunication network.

The management circuit is embedded in the COT panel and the communication takes place on the power wires.

- Remote power feeding and transmission quality indicators
- Inventory listing, device status and alarm messages
- Various statistics, line testing and event log