
Coal mine communication 5g base station

How can a 5G network help a coal mine?

As a result, the 5G network needs to provide an uplink capacity of 100 Mbps every 200 metres. Once the video streams are transferred, the mine's video content analysis system can quickly identify safety risks on coal conveyor belts, such as belt misalignment, large or stacked coal pieces on the belts, and personnel on the belts.

How can 5G improve mining operations?

The 5G-enabled device inspection reduces the workload of personnel at mines, while the remote control of mining vehicles keeps workers away from underground dangerous areas. For example, the Xinyan Coal Mine in the Shanxi province has been able to halve the number of staff working at the mining face to 65

Which Chinese mines are deploying 5G?

Other mines in China are seeing similar benefits from deploying 5G. Huawei was also involved in the installation of a 5G network at the Xinyan Coal Mine of Lvliang Dongyi Group Coal Gasification Co., which is located in Lyuliang, in the Shanxi province.

What is a 5G private network?

Shanxi Xiangning Coke Coal Group, together with China Unicom Industrial Internet (Shanxi) and Huawei, deployed a 5G private network in October 2021 in the Yanjiahe Coal Mine. The network can transfer videos captured by connected HD cameras underground to the equipment room above ground for content analysis and risk identification.

PRESS RELEASE: As 5G becomes more deeply integrated into mining operations, complex underground operating environments are ...

The breakthrough of underground unmanned driving application that 5G new communication network will bring is analyzed. And the construction mode of 5G platform of ...

Take the 5G application in coal mines for example, unlike base stations above ground, those underground must be in line with the safety production and explosion-proof ...

A new integration mode, an innovative base station with built-in safe features, and a new cloud-network architecture were used to promote the smart development of Dahaize Coal ...

Recently, Laoshidan Coal Mine at CHN Energy's Wuhai Energy achieved a significant technological breakthrough with the launch of China's first 5G smart control terminal ...

Ultra-reliable 5G ushers in a new era for mining China Unicom plans to install private 5G networks in more than 100 mines The Yanjiahe Coal Mine in ...

The 5G Deep Mobile Network (DMN) is an intelligent and comprehensive dedicated mobile communications network for ...

The mine-used 5G hybrid networking wireless system mainly uses 4G technology to provide voice calls, and 5G technology mainly provides high-definition video analysis, big data transmission ...

On September 26, Shendong Coal's Cuncaota Coal Mine integrated its steel wire rope inspection robot for the No.22 main coal transportation system with a newly-deployed 5G ...

Ultra-reliable 5G ushers in a new era for mining China Unicom plans to install private 5G networks in more than 100 mines The Yanjiahe Coal Mine in the Shanxi province of China is using a 5G ...

Based on the mobile edge computing (MEC) technology of 5G wireless base station and actual situation of coal mines, the underground 5G communication capability is improved ...

A novel compact 5G multiple-input-multiple-output (MIMO) base station (5G-BS) is introduced for enhancing communications in underground mine environments. The structure ...

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