

## **APORT100P box can help us to monitor RS232 device**

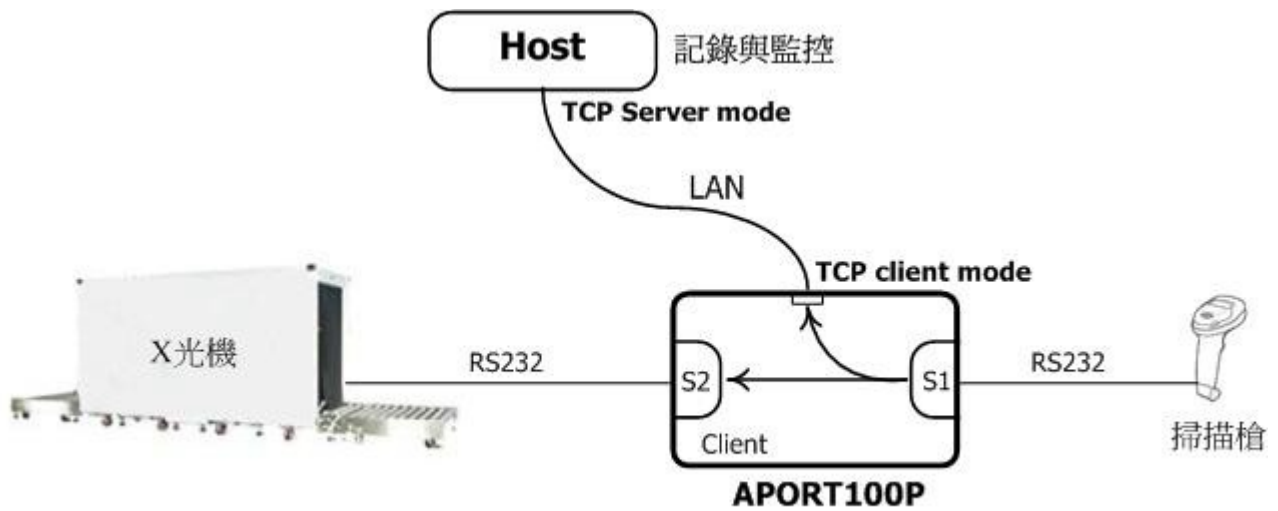
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Generally we may use RS232 connection between host and device. When we have abnormal function happened and it is not easy to find the reason for such condition. The record in device A may show no problem in function and it must be malfunction in device B. And the record in device B may show no problem in function and it must be malfunction in device A. So we may need to check the data record in device A and device B to find the possible reason for abnormal condition.

For example we may have scanner device in one X-ray inspection system. We have RS232 connection between scanner device and X-ray machine. Even though X-ray machine may record the data from scanner device. But we can not confirm the scanner device is operated correctly. And we can not confirm the X-ray machine worked and recorded correctly. As we know that it is not easy to confirm the data integrity between data source and data receiver. When there are different data record in data source and data receiver, we can not confirm which data record is correct one. So it is best for one data source and two data receivers in control system. When two data receivers have same data record and with different data record in data source, then we may have problem in data source (data record in device and data send in device may not coincide with malfunction). When two data receivers have different data record and one of data receiver is same data record with data source, then we may have problem in such data receiver with different data record.



Now we can add one APORT100P box between scanner device and X-ray machine. When scanner device send data to X-ray machine, such data can send to monitor computer via IP network simultaneously. So we can have same data from scanner device to X-ray machine and monitor computer. Because it is based on IP network, so we can have such monitor computer in any location and change location anytime.



If there were someone to modify data in X-ray machine, then it is not easy for us to sense such condition in original structure. But we can have same data record in monitor computer now, so it is easy for us to check the abnormal condition.

Here we use X-ray machine and scanner system to show the function for APORT100P box. For any control system with RS232 connection we can use APORT100P box to improve system security and abnormal trace. When you can only have one to talk and one to listen environment, it is not reliable and not easy to find bad guy.