

# Multiple Denial of Service (DoS) Vulnerabilities in TCP/IP Protocol Stack of MELSEC Series Remote I/O

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Mitsubishi Electric Corporation

## ■ Overview

Multiple Denial of Service (DoS) vulnerabilities due to improper input validation (CWE-20) exist in TCP/IP protocol stack of MELSEC Series Remote I/O. A remote attacker may cause a DoS condition in MELSEC Series Remote I/O by sending specially crafted packets. (CVE-2020-35683,CVE-2020-35684,CVE-2021-31401)

## ■ CVSS

CVE-2020-35683 CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H Base Score:7.5  
CVE-2020-35684 CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H Base Score:7.5  
CVE-2021-31401 CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H Base Score:7.5

## ■ Affected products

Affected products and versions are below.

### MELSEC Series Remote I/O(\*)

Model Name	Version
NZ2FT-EIP	All versions
NZ2FT-MT	
NZ2FT-PN	
NZ2FT-GN	
NZ2FT-PBV	
NZ2FT-BT	

(\*) These products are sold in limited regions.

## ■ Description

Multiple DoS vulnerabilities due to improper input validation (CWE-20) exist in TCP/IP protocol stack of MELSEC Series Remote I/O. (CVE-2020-35683,CVE-2020-35684,CVE-2021-31401)

## ■ Impact

A remote attacker may cause a DoS condition in MELSEC Series Remote I/O by sending specially crafted packets.

## ■ Countermeasures

Mitsubishi Electric will release a fixed version in the future.

## ■ Mitigations/Workarounds

Mitsubishi Electric recommends that customers take the following mitigation measures to minimize the risk of these vulnerabilities:

- Use a router, firewall, virtual private network (VPN), DMZ, etc. to prevent unauthorized access when Internet access is required.
- Use these products within a LAN and block access from untrusted networks and hosts through firewalls.
- Restrict physical access to industrial network and affected products. (e.g. storing in locked cabinets, attaching seals to unused Ethernet/USB ports)

## ■ Contact information

Please contact your local Mitsubishi Electric representative.

< Inquiries | MITSUBISHI ELECTRIC FA >

<https://www.mitsubishielectric.com/fa/support/index.html>