

# Safety-Critical Software Verification Certificate

**Certification Body:** CSL Verification Authority  
**Document Type:** Safety-Critical Software Verification Certificate

## Subject

Medical Device Software Module (Insulin Pump Controller)

**Safety Classification:** IEC 62304 Class C / FDA 510(k)  
**Verification Level:** Formal Methods + Cryptographic Integrity

## Certificate

**Certificate ID:** 14c2a26148b15bcce8aed6615fbd37c974e492f8db5631371e16aa5178bf2776  
**Issued At:** 2025-10-17 15:26:14 UTC  
**Validity Period:** 3 years  
**Next Verification Due:** 2028-10-17 15:26:14 UTC

## Transformation Chain

Stage	Bytes	SHA-256
ORIGINAL	4190	14c2a26148b15bcce8aed6615fbd37c974e492f8db5631371e16aa5178bf2776
CANON	4190	14c2a26148b15bcce8aed6615fbd37c974e492f8db5631371e16aa5178bf2776
PACK (zlib)	1544	35582f3975966321803ff1188fcab03c049a4a64125268eab71294c28f1edc12

## Compression Attestation

Algorithm: zlib  
Original Size: 4190 bytes  
Compressed Size: 1544 bytes  
Compression Ratio: 0.3684964200477327

## Reproducibility

Canonical and original digests match. The certification is deterministically reproducible from the canonical bytes.

## Signature

Pending external digital signing. Attach a detached signature and public key reference upon issuance.